

ENVIRONMENTAL ASSESSMENT BOARD



ONTARIO HYDRO DEMAND/SUPPLY PLAN HEARINGS

VOLUME: 160

DATE: Wednesday, June 10, 1992

BEFORE:

HON. MR. JUSTICE E. SAUNDERS	Chairman
DR. G. CONNELL	Member
MS. G. PATTERSON	Member

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ENVIRONMENTAL ASSESSMENT BOARD
ONTARIO HYDRO DEMAND/SUPPLY PLAN HEARING

IN THE MATTER OF the Environmental Assessment Act,
R.S.O. 1980, c. 140, as amended, and Regulations
thereunder;

AND IN THE MATTER OF an undertaking by Ontario Hydro
consisting of a program in respect of activities
associated with meeting future electricity
requirements in Ontario.

Held on the 5th Floor, 2200
Yonge Street, Toronto, Ontario,
Wednesday, the 10th day of June,
1992, commencing at 10:00 a.m.


VOLUME 160

B E F O R E :

THE HON. MR. JUSTICE E. SAUNDERS	Chairman
DR. G. CONNELL	Member
MS. G. PATTERSON	Member

S T A F F :

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MR. R. NUNN	Counsel/Manager, Information Systems
MS. C. MARTIN	Administrative Coordinator
MS. G. MORRISON	Executive Coordinator



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M. CAMPBELL)	PUBLIC HEALTH COALITION
		(OPHA, IICPA)
G. GRENVILLE-WOOD		SESCI

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1 ---Upon commencing at 10:00 a.m.

2 THE REGISTRAR: Please come to order.

3 This hearing is now in session. Please be seated.

4 MS. MARLATT: Good morning.

5 I have a final set of questions for Mr.

6 Snelson.

7 AMIR SHALABY,
8 JOHN KENNETH SNELSON,
9 JANE BERNICE TENNYSON,
10 FREDERICK GEORGE LONG,
11 BRIAN PAUL WILLIAM DALZIEL,
12 HELEN ANNE HOWES; Resumed.

13 CROSS-EXAMINATION BY MS. MARLATT (Cont'd):

14 Q. Mr. Snelson, I would ask that you
15 look with me to page 36, of our Exhibit 710. And so
16 far during cross-examination there have been quite a
17 few questions around the nuclear moratorium in November
18 of 1990, and what I would like to do is just look
19 precisely at the wording of this letter. This is a
20 letter dated November 16th, 1990 to Mr. Franklin who
21 was at that time President and Chief Executive Officer
22 of Ontario Hydro, and it was from Marc Eliesen, Deputy
23 Minister, Ministry of Energy.

24 I would like you to look with me to the
25 fourth paragraph which starts: The government is
requesting Ontario Hydro to... Looking down two
paragraphs:

1 Suspend all activities and spending on
2 the proposed new CANDU "A" station and
3 redirect the \$67.1 million approved by
4 the Board, plus the 172.4 million
5 budgeted for 1992/93 for pre-engineering
6 and site studies for this project to
7 conservation programs.

8 Looking on to the next page, page 2 of
9 that letter, the third paragraph states:

10 The government has also reconfirmed
11 that the Environmental Assessment Board
12 review of Ontario Hydro's Demand/Supply
13 Plans is an appropriate means for
14 receiving public input into Hydro's plans
15 to meet future electricity needs and for
16 assessing the costs and environmental
17 impacts of all major future supply and
18 demand options.

19 Mr. Snelson, I read this as, and could
20 you let me know if this is your opinion too, as halting
21 the site-specific studies for nuclear? That was what
22 the purpose of this letter was in that specific area,
23 would you agree with me?

24 MR. SNELSON: A. It certainly had that
25 effect, yes.

1 Q. But there is nothing in this letter
2 that constrained Ontario Hydro from seeking a nuclear
3 approval on a planning level?

4 A. I believe that is the case.

5 Q. Thank you.

6 THE CHAIRMAN: I believe that letter
7 already may have been an exhibit earlier. I don't know
8 whether it is or not, but if it isn't perhaps it should
9 be marked as an exhibit.

10 MS. MARLATT: I'm sorry, Mr. Chairman, I
11 should have explained. It was attached to page 35 of
12 Exhibit 710, and that is Interrogatory No. 9.2.115, and
13 that was entered as Exhibit No. 520.34, I believe
14 that's correct.

15 THE CHAIRMAN: That is fine. Thanks very
16 much.

17 MS. MARLATT: Q. Looking at page 43,
18 this is during cross-examination by Mr. Rodger
19 concerning the effect of the moratorium. At line 18 we
20 see the characterization:

21 "...then there is a change in
22 government, whose philosophy is
23 anti-nuclear and a moratorium on nuclear
24 is imposed, and a few months later Hydro
25 comes out with a plan that has no nuclear

1 in it, and that is a happy coincidence,
2 is it?"

3 Mr. Snelson, I would first like to ask
4 you, a few months later, in fact the letter you
5 received was dated November 1990 and the Update was
6 January 1992; correct?

7 MR. SNELSON: A. Yes.

8 Q. So it was in fact a year and some
9 months before Ontario Hydro determined that it would
10 finally pull a nuclear approval from this hearing;
11 correct?

12 A. Yes.

13 Q. I have some questions for Mr.
14 Dalziel.

15 ---Off the record.

16 MS. MARLATT: Q. Mr. Dalziel, concerning
17 distributive versus integrated systems, in analyzing
18 the costs and benefits of both types of systems, did
19 you ever consider planning around a system approach
20 that would use the benefits of both types of systems?

21 MR. DALZIEL: A. Benefits of both types,
22 you mentioned the distributed system.

23 Q. An the integrated system approach.

24 A. I think to the extent that we are
25 viewing non-utility generation as a distributed source

1 of generation, I said this in my direct, that we think
2 that we are taking one of the better features of that
3 distributed generation approach and incorporating it
4 into our Demand/Supply Plans.

5 Q. So you would agree with me then it's
6 not an either or situation, you don't have to choose
7 one type of system or another, you could find a happy
8 compromise between the benefits of both types of
9 systems?

10 A. To an extent. I think it's a matter
11 of degree as to whether you are predominantly more of a
12 central generating type of system, strongly
13 interconnected, then it's a matter of degree to which
14 you have been able to pick up the benefits of
15 distributed resources on top of that.

16 Q. Looking at page 48, and this is from
17 Volume 149, page 26301, I had a question about your
18 answer to one of the questions. At line 9, and I
19 believe that this was a discussion about distributive
20 systems, you stated:

21 "...a large number of sites across the
22 province will be required, about as many
23 as 50 sites, and about half of these
24 would have to be required, would have to
25 be sited in the Greater Metropolitan

1 Toronto area."

2 Now, am I correct in characterizing this
3 as a concern you had about the distributive system
4 approach?

5 A. In general, that's right.

6 Q. I guess my question then is, in
7 reading this as a concern that could result from using
8 that type of system in its entirety, it would appear to
9 me at least that the sites that you are talking about
10 which would be half of the required sites for future
11 planning, would have to be in Metropolitan Toronto.
12 Would it not be then interpreted that half of the
13 future load is coming from Metropolitan Toronto and
14 that's why you would have to have those sites there?

15 A. Typically in that distributed
16 generation approach, that is it exactly what you are
17 trying to do, is you are trying to match the location
18 of generating stations with the major load centres. So
19 essentially that's correct, that a lot of the load
20 would be being supplied by the local generation.

21 Some of that also might be making up for
22 retirement of generation which is also already existing
23 in the Greater Metropolitan Toronto area.

24 Q. So half of the future sites under
25 this planning method would have to be in Toronto, or

1 the Metropolitan Toronto area?

2 A. In the Greater Metropolitan Toronto
3 area under this type of approach.

4 Q. And the final question for Mr.
5 Snelson. Mr. Snelson, do you recognize that Aboriginal
6 issues not limited to social and economic impacts?
7 They are in fact a part of the entire planning process?

8 MR. SNELSON: A. Can you repeat the
9 question?

10 Q. Do you recognize that Aboriginal
11 issues are not limited to social and economic impacts
12 of the plan, but that in fact they can affect the
13 entire planning process, the way in which you plan?
14 [10:13 a.m.]

15 A. I think that there are a number of
16 groups in society including Aboriginal groups who have
17 interest and concerns with the entirety of our
18 planning.

19 Q. For example, areas such as judgment
20 and weighing of criteria, those are areas in which
21 different groups may perceive the process differently
22 from Ontario Hydro.

23 A. Yes.

24 Q. And their input, therefore, is
25 important to Ontario Hydro in making those final

1 determinations.

2 A. Yes.

3 Q. All right. Dr. Tennyson, I would
4 like to ask you to look to page 74. And this is
5 Interrogatory 11.40.14.

6 THE REGISTRAR: That will be .34.

7 ---EXHIBIT NO. 683.34: Interrogatory No. 11.40.14.

8 MS. MARLATT: Q. And this is a question
9 from the Aboriginal Research Coalition asking for:

10 "...copies of all reports and studies
11 done for or by Ontario Hydro or
12 considered by Ontario Hydro with regard
13 to the cumulative impacts of past Ontario
14 Hydro and related activities and
15 non-Ontario Hydro projects on Aboriginal
16 harvesting, activities of hunting,
17 fishing, trapping and gathering.

18 And the response is:

19 "No such studies have been done
20 regarding cumulative impacts of past
21 Ontario Hydro activities."

22 Would you confirm that this is still the case?

23 DR. TENNYSON: A. I would confirm that
24 no such studies have been done. But depending on, as
25 you are well aware, we are working on, in terms of the

1 Basin that there has been an agreement to work on
2 cumulative effects. In terms of our other project
3 work, part of what we are addressing is the impacts of
4 past activities on the communities and looking to
5 redress them in various ways. So there are no studies,
6 in answer your question. The interrogatory response is
7 correct.

8 Q. Even in the way that you are looking
9 at them, would it be correct to say that those are with
10 regards to specific projects, that there have not been
11 studies or reports done on a broad planning level for
12 Ontario as to what have been the cumulative impacts of
13 all of Ontario Hydro's activities which have impacted
14 on Aboriginal peoples?

15 A. As I said, we have not done
16 cumulative effects. But certainly we are looking at
17 the broad range of Hydro activities in terms of we are
18 not just dealing with specific projects. Obviously, in
19 an area there have been a number of perhaps past
20 projects that have had some effect, and we are looking
21 at that.

22 Q. I would like to ask you to look at
23 Exhibit 535, and that is the final report: Public
24 Government Review and Input into Ontario Hydro's
25 Demand/Supply Planning Process. Looking at page 20, it

1 is my review of this report that page 20, 21, and 22
2 describe the process by which you got feedback from
3 communities; is that correct, Dr. Tennyson?

4 A. That's correct.

5 Q. So looking at the heading 4.2,
6 Information Centres, the information based information
7 centre activities were conducted over the period from
8 January 8th to March 30th, 1990.

9 Dr. Tennyson, are you aware whether or
10 not any of these information centres were held on
11 reserves?

12 A. As I understand it, the one that was
13 referred to in terms of DSP and Aboriginal communities,
14 4.7, it makes reference to the information centre in
15 Moose Factory and Moosonee.

16 Q. Are you aware of any others?

17 A. No.

18 Q. Are you aware of whether or not
19 Ontario Hydro requested any of the First Nations to
20 consider hosting one of these information sites on a
21 reserve?

22 A. I don't know the answer to that. I
23 do know, though, that there were many measures taken to
24 involve Aboriginal people in terms of we did a letter
25 contact and then there were subsequent phone calls

1 trying to encourage as much participation as we could.

2 Q. I'm actually looking just at
3 geographical locations right now in terms of where the
4 information centers were held. Part of the process
5 described here states that, to be fair to you, that
6 centres were held in Northern Ontario to ensure that
7 Aboriginal participation was a possibility.

8 What I am looking at is even more
9 specific than that, whether or not Ontario Hydro sought
10 to have any of these centres held on or adjacent to a
11 reserve.

12 A. I think as was stated I think that
13 locations were chosen to try and encourage
14 participation in all areas. And it would have been
15 specifically to get both Aboriginal and non-Aboriginal
16 people to attend.

17 Q. So the vast majority, if not all of
18 the information centres, were held, then, in non-Native
19 communities.

20 A. To a large extent. But as you are
21 fully aware, there are a lot of Aboriginal people that
22 live off reserve in many of these communities, as well.

23 Q. Looking at 4.6, Public Communication
24 Initiatives, and this may be what you have just
25 referred to, that these activities involved inviting

1 and tracking the subject matter of telephone calls to
2 two 800 services and mail-back coupons from newspaper
3 advertisements.

4 A. Actually, no, that was a separate
5 activity.

6 Q. Separate?

7 A. What I am stating is that invitations
8 were sent out on a broad, broad basis to try and get
9 the maximum participation in attendance at these
10 centres. And as well, as I understand it, there were
11 in addition in areas follow-up telephone calls to try
12 and ensure additional awareness of the centre in that
13 location. Clearly, there were newspaper ads, there
14 were written invitations, there were also some calls
15 made.

16 Q. That part of the program which
17 involved telephone calls and the bottom of page 21, I
18 think there is short description there of the process
19 you have just described, 4.7, second sentence:

20 During these information centres and
21 several others, efforts were made to
22 contact members of Aboriginal communities
23 and representatives of organizations by
24 telephone.

25 Is that what you are referring to?

1 A. That's correct.

2 MR. B. CAMPBELL: I think in fairness
3 that section also continues on to page 25.

4 MS. MARLATT: Yes, it does. I am just
5 trying to see whether or not that is the section you
6 are referring to, the process.

7 That is the general process.

8 DR. TENNYSON: A. I think we were going
9 to go on to that.

10 Q. I would be happy to continue that
11 sentence, though:

12 Efforts were made to contact members
13 of Aboriginal communities and
14 representatives of organizations by
15 telephone to reiterate the written
16 invitations that have been sent prior to
17 the centres.

18 And then does go on to page 25, which describes the DSP
19 information centre at Moose Factory.

20 Could you tell me, Dr. Tennyson, with
21 regards to the actual telephone calls to follow up and
22 to ask people to attend the centres, do you know
23 whether or not when the telephone calls were made the
24 individuals from Ontario Hydro making those calls told
25 the potential participants that this feedback program

1 could be used to determine public acceptability of
2 certain options, that that was the purpose of the
3 feedback program?

4 A. I wouldn't know the exact words that
5 were exchanged. But I can only assume that the reasons
6 for the particular centres which were to inform people
7 to get the feedback, to have input into this, would be
8 something that would be mentioned in an invitation in
9 trying to, as I say, encourage participation.

10 Q. Would you agree with me, Dr.
11 Tennyson, that it may be slightly different if they
12 were requested to come and give their input on the
13 Demand/Supply Plan compared to a request to come and
14 talk to Ontario Hydro about what they think about
15 nuclear plants, that that may get a different response,
16 particularly from Native intervenors who may be
17 concerned about nuclear issues?

18 A. Once again, I can only speculate.
19 But if I were involved in that conversation, I would
20 have mentioned all of those things to try and encourage
21 participation

22 Q. But you did not do the telephone
23 calls yourself?

24 A. No.

25 Q. Now, the process that is reviewed in

1 that chapter 4 on pages 20, 21, and 25, the process
2 there appears to be very similar for Native and
3 non-Native involvement as part of the feedback program.

4 Now, would I be correct in saying that
5 efforts were made to encourage Aboriginal attendance at
6 information centres but that there was not a difference
7 in how they were treated once they attended the
8 information centre?

9 [10:25 a.m.]

10 A. In terms of attending the information
11 centre, once again there would not have been any
12 difference in treatment. All people attending were
13 presented with the same - to my knowledge, the ones
14 that I attended anyway - the same program.

15 We certainly took everyone around,
16 explained all the panels, had the various experts, as I
17 explained yesterday, that there were people from sort
18 of the technical area as well as the regions, as well
19 as corporate relations, our group. And then a lot of
20 dialogue was encouraged, as well would they fill out
21 the questionnaire to try and get the results.

22 Q. So the actual feedback part of the
23 program was the same for Native and non-Native;
24 correct?

25 A. That would be correct. However, if

1 go on to read these materials you will recognize that
2 in terms of our discussions with First Nations and
3 Aboriginal representatives, the need was recognized to
4 translate materials, and that was done. As well, as
5 soon as the Demand/Supply Plan was submitted and at the
6 same time as these activities were going on in the
7 local areas, Ontario Hydro met with the Chiefs of
8 Ontario and that's in fact where one treaty group
9 indicated its interest in having more meetings on the
10 Manitoba Purchase and its associated transmission, and
11 that was followed up with. As it says here as well,
12 your clients were met with in that spring as well.

13 So I think there were efforts going on at
14 the same time to encourage additional feedback in
15 whatever ways were appropriate.

16 Q. Dr. Tennyson, with reference to that
17 meeting in the spring of that year with the North Shore
18 Tribal Council, would you agree with me that that
19 meeting was not held to discuss general views of the
20 Demand/Supply Plan; it was in fact held to discuss
21 potential participation by the North Shore Tribal
22 Council in site-specific studies for nuclear?

23 A. I was not in attendance at meeting
24 and I could not answer that.

25 Q. Looking at page 82 of the materials,

1 this is Interrogatory No. 10.4.45.

2 THE CHAIRMAN: Number please?

3 THE REGISTRAR: .35.

4 ---EXHIBIT NO. 683.35: Interrogatory No. 10.4.45.

5 MS. MARLATT: Q. I would just like to
6 confirm with you, Dr. Tennyson, the last sentence of
7 the response, that it is not possible to break this
8 data down between Natives and non-Natives. So there
9 was no breakdown of feedback information received from
10 Native versus non-Native participants?

11 DR. TENNYSON: A. That's correct.

12 Q. I would like to move into an area of
13 questions about economics.

14 After the previous discussions yesterday
15 and the day before, is it fair to say that no one on
16 this panel is testifying as an expert in economics?

17 MR. SNELSON: A. Yes, that is fair.

18 Q. Thank you. And I would assume then
19 that no one is testifying as an expert in Aboriginal
20 economies.

21 DR. TENNYSON: A. That's correct.

22 Q. Dr. Tennyson, would I be correct in
23 stating that Ontario Hydro has not put forth any
24 reports or documentations for the DSP on issues around
25 Aboriginal economies such as of the difference between

1 the operation of the wage in traditional economies?

2 A. That's correct.

3 Q. There has been some discussion, and I
4 will turn these questions to you, Dr. Tennyson, there
5 has been some discussion about the economic impacts on
6 a provincial basis for certain options such as nuclear,
7 and I would like to ask you whether or not you would
8 agree with me that the provincial analysis for certain
9 options, the economic analysis, may be quite different
10 from impacts on a regional or local level?

11 A. Yes, I would agree.

12 Q. So you would agree that there may be
13 a difference in economic impacts from locating say a
14 nuclear plant which would require 7,000 construction
15 workers at its peak time, beside a centre such as
16 Pickering with 66,000 people, compared to a centre such
17 as Mississagi First Nation with 400 people?

18 A. I would agree that the impacts would
19 be different.

20 Q. That's all I am asking at this point.

21 Would you agree with me, Dr. Tennyson,
22 that in a smaller, much smaller community, and let's
23 work with the population of Mississagi First Nation
24 which is approximately 550 members, that there would be
25 less available labour and that there may be a much

1 higher influx of workers in order to meet that have
2 7,000 construction jobs?

3 A. Well, clearly, the labour force in
4 the area that you would been looking at would not just
5 be from that small community, I mean, there would be a
6 regional draw. But I would agree with you that there
7 would potentially be a lot more in-migration in an area
8 like that then there would be in some developed areas
9 of Southern Ontario.

10 Q. And would you agree that the
11 community located closest to a nuclear plant tends to
12 be the one with most impact, particularly if we are
13 talking --

14 A. I guess it depends what type of
15 impact you are talking about.

16 Q. Let's discuss that then. Just so I
17 understand Ontario Hydro's position, it's your position
18 that it is preferable to use local labour on
19 construction and operation of your projects; is that
20 correct?

21 A. We are trying to encourage that. The
22 position being that the people in the area should share
23 in the benefits of any project. And in terms of our
24 work in sort of Northern Ontario, the Throne Speech
25 directed as well that benefits should accrue to

1 northerners and Aboriginal people from our activities,
2 and we are in total agreement with that.

3 Q. So two of the reasons for preference
4 for local labour that I have heard from you is the one
5 that you have just stated, which is economic benefit
6 accruing to the community most affected, the second is
7 to minimize community disruption?

8 A. Yes, and other community impacts,
9 yes.

10 Q. Looking at page 94, this is
11 Interrogatory No. 9.23.7.

12 THE REGISTRAR: .36.

13 ---EXHIBIT NO. 683.36: Interrogatory No. 9.23.7.

14 MS. MARLATT: Q. This is an
15 interrogatory which asks which project areas would
16 require the most in-migration of construction workers
17 for each type of facility, nuclear and fossil and IGCC.

18 We see here in the response to this
19 interrogatory that migration levels for these types of
20 facilities are the highest in the North Channel area
21 compared to any of the other illustrative siting areas.

22 Do you see that, Dr. Tennyson?

23 DR. TENNYSON: A. I see it.

24 Q. Would you agree with that?

25 A. Seeing it in your package was the

1 first time that I saw it, and having looked at it, I
2 can see that those assumption make sense. I don't know
3 that I would agree with all of the ordering, but I
4 think that the notion is that in an area that is less
5 populated and has a smaller work-force would for
6 certain types of facilities, obviously you can
7 hypothesize anyway that you can get more in-migration.

8 Q. Does this factor that you look at
9 with community-based labour as much as possible, does
10 it ever act as a constraint on Ontario Hydro
11 developments, for example, that you wouldn't consider
12 locating a project somewhere where there was not
13 adequate local labour?

14 A. I can't say that that has ever
15 occurred.

16 I think the thrust is more to make sure
17 that as much of the -- as I say, any economic benefits
18 in terms of employment and spending accrue to the local
19 and regional area. And to that end, in terms of when I
20 talk about impact management, I think I will argue that
21 measures have to be taken to ensure that benefits are
22 enhanced or that they do occur. So as the same way
23 that you mitigate to offset negative, you have to take
24 measures to ensure that these types of positive impacts
25 do occur.

1 So that we are in fact making major
2 efforts now to do that, just that. We have committees
3 in Hydro looking at our purchasing policies, we have
4 committees looking at employment and training. And one
5 of the issues that comes up obviously in terms of some
6 of the smaller centres is the size of our contracts,
7 and so we are looking at what would can do about the
8 size of contracts to ensure much more local and
9 regional benefits.

10 Q. Dr. Tennyson, would you agree with me
11 that just looking at this one factor, in-migration of
12 workers, it is possible that there is nothing Ontario
13 Hydro could do in certain areas in Ontario to ensure
14 that there are more positive benefits than negative
15 impacts as a result of in-migration of workers, just
16 that one criteria?

17 A. I don't know, hypothetically I guess.
18 I use that. In-migration is a good predictor because
19 certainly that can be a major impact. But depending on
20 the community, some communities want to go grow. I
21 mean, you can't look at something and say it is
22 necessarily a negative.

23 Q. What I am asking you to do is the
24 opposite, Dr. Tennyson. Can you look at that and tell
25 me it's not necessary positive, it depends largely --

1 A. In some areas.

2 Q. It depends largely upon what the
3 community thinks?

4 A. Certainly some communities would not
5 welcome it and would be very concerned about the
6 influx.

7 Q. Would you agree with me then, Dr.
8 Tennyson, if we are looking at the hypothetical where
9 we have a very small population base, large influx of
10 workers, that the potential boom and bust effect in
11 that community could be devastating on a smaller
12 community that has a less diversified economy?

13 A. Boom and bust is something that
14 clearly all of the social impact literature is pretty
15 well based on and certainly looks at.

16 Ontario Hydro has for almost 20 years now
17 in its activities tried to and has been, and as I
18 suggested yesterday, very successful in managing that
19 kind of situation.

20 We certainly look at the effects of our
21 activities in terms of what would be any of those types
22 of effects and how would they be managed. And that's
23 been a fundamental philosophical approach.

24 So in terms of Ontario Hydro, I would say
25 they would not do something in your hypothetical

1 situation.

2 Q. All right. Would you agree with me,
3 Dr. Tennyson, that again just talking about
4 in-migration of workers, that there may be a difference
5 in locating a large plant that requires in-migration of
6 workers beside a heterogeneous population such as say
7 Pickering where there is a wide of variety of different
8 people with different skills and different backgrounds,
9 compared to a homogeneous population such as the
10 Mississagi First Nation, their shared common values,
11 shared culture, shared languages, that they may have a
12 different type of impact on those times of communities?

13 A. I would certainly address that.

14 Q. Would you agree that there is such a
15 thing as a sensitive population, i.e., a population
16 that is particularly sensitive to change?

17 A. That is why one of our criteria has
18 always been special sensitive groups. Clearly in the
19 literature and in our work, it could be, for example,
20 in a particular area that the elderly are particularly
21 sensitive to change, or it could be, you know, people
22 that have been an area for generations as well. That's
23 the kind of things we have to look at and be sure that
24 we do address.

25 Q. And it may be difficult if you bring

1 in large amounts of labour from outside that community
2 in such a case?

3 A. I think we have all seen that,
4 certainly that area has too with the historic
5 developments.

6 Q. And a community such as Mississagi
7 First Nation may also have its own economic plans for
8 the future; correct?

9 A. Clearly.

10 Q. Further, within a First Nation
11 community there is also the concern about both a wage
12 and the tradition economy and how they operate and how
13 they could be impacted on--

14 A. Yes.

15 Q. --by development?

16 Are you familiar with the term "economic
17 development officer"?

18 A. Yes.

19 Q. Have you met specifically -- and just
20 for the Board's interests, economic development
21 officers are located, at least on the North Shore
22 Tribal Council within each First Nation.

23 And what I was wondering, Dr. Tennyson,
24 is whether or not you have met with an economic
25 development officer or group of economic development

1 officers specifically to discuss economic impacts on
2 First Nations as part of the plan? Got that in there.
3 [10:37 a.m.]

4 A. I did not personally as part of the
5 plan. But you know that in the work we did leading up
6 to that in which a lot of our understanding is based on
7 was, for example, the Little Jackfish project, and that
8 was certainly done. It's been done, I had certainly
9 method with EDOs in the past on other projects before.
10 So that kind of knowledge or awareness was available to
11 us and part of what we knew at that time. Since then I
12 have met with many, many.

13 Q. Have you discussed with them the
14 impacts of something like Ontario Hydro's planning
15 processes and how they interrelate with the individual
16 First Nations economic development initiatives for the
17 future?

18 A. Are you talking historically or now?

19 Q. Actually, I'm talking in developing
20 the Demand/Supply Plan.

21 A. Specifically, I would not know, and I
22 certainly did not have those types of discussions.

23 Q. I would ask you to look at page 87,
24 Interrogatory 10.7.20.

25 THE REGISTRAR: .37

1 ---EXHIBIT NO. 683.37: Interrogatory No. 10.7.20.

2 MS. MARLATT: Q. And the response to
3 this interrogatory which deals with the issue of demand
4 management programs and regional development, the
5 second paragraph states, the second sentence states:

6 However, such programs...meaning the
7 delivery of demand management programs...
8 can provide regional economic benefits.
9 A pilot project to encourage energy
10 efficiency in Espanola, Ontario will
11 involve the hiring of contractors from
12 the region and a significant amount of
13 local and regional purchases and
14 expenditures.

15 Would you agree with me, Dr. Tennyson, that it's
16 possible that this type of project may be more
17 compatible with a community such as Espanola's desire
18 for regional development compared to a mega project?

19 DR. TENNYSON: A. More compatible? I
20 couldn't say that in terms of Espanola and the area,
21 other parts of the area along the North Shore or in
22 Elliot Lake. I'm not convinced that that is true, what
23 you are saying.

24 Q. Have you done studies on that issue?

25 A. Which issue?

1 Q. The issue of the types of impacts on
2 a local community such as on the North Shore area from
3 Elliot Lake to Espanola and how demand management
4 programs may have economic impacts compared to large
5 scale developments.

6 A. No, as it suggests in the response to
7 this interrogatory, this is a pilot project. And
8 certainly as part of its evaluation that is being done,
9 that is one of the things that will be looked at.
10 Obviously, we would want to know how much spending and
11 purchasing, et cetera, is going to the local community
12 as opposed to, say, Sudbury. And the same thing for
13 any of the work, where the worker is coming from and
14 that kind of thing.

15 Q. From that pilot project, will there
16 be a follow-up report that will be available to us to
17 tell us about the economic development of that program?

18 A. I know there is going to be a report.

19 Q. Will it address issues such as the
20 local impact on the Espanola economy, do you know?

21 A. It better.

22 Q. Thank you. In terms of sustainable
23 development, would you agree with me that in
24 determining whether or not economic development in a
25 region is sustainable economic development, that you

1 have to consider the size, the nature, and the
2 diversity of a regional or local economy?

3 A. I would agree to that.

4 Q. Thank you.

5 Ms. Howes, I have some questions for you.
6 Looking at page 97. I would just like you to confirm
7 that this interrogatory response is correct. This is
8 Interrogatory No. 10.32.18.

9 THE REGISTRAR: .38.

10 ---EXHIBIT NO. 683.38: Interrogatory No. 10.32.18.

11 MS. MARLATT: Q. And the question is
12 regarding:

13 "A quantitative description,
14 evaluation, and assessment of the present
15 and future environmental/health effects
16 of Ontario Hydro's emissions to the
17 atmosphere or water, and those of its
18 solid wastes, including the contribution
19 by other sources. This should include an
20 evaluation of existing impacts to provide
21 an initial benchmark against which the
22 incremental effects can be measured."

23 Now, the response, looking at the last
24 sentence of the response;

25 "Hydro does not have studies that

1 provide an initial benchmark against
2 which incremental effects can be
3 measured."

4 Is that accurate?

5 MS. HOWES: A. That is correct. I would
6 also add, though, part of any siting study would have
7 to develop some background environmental baseline data,
8 and that is a critical starting point for all of our
9 environmental assessment studies.

10 Q. Looking at the next page, which is
11 Interrogatory 10.32.19.

12 THE REGISTRAR: That is .29.

13 ---EXHIBIT NO. 683.29: Interrogatory No. 10.32.19.

14 MS. MARLATT: Q. Similar types of data
15 is requested by the Ministry of Environment with
16 regards to emissions and waste disposal from the
17 present generating system and other sources.

18 And the second last sentence asks for:

19 "This includes emissions and disposal
20 of wastes to the atmosphere, surface, and
21 ground waters and land. This evaluation
22 will provide an initial benchmark against
23 which the incremental future effects of
24 increased emissions and wastes from
25 Ontario Hydro and other sources can be

1 measured."

2 And we referred back to the interrogatory
3 we just discussed, which again says Hydro does not have
4 such studies.

5 A. No, but the Ministry of Environment
6 is fully aware of the emissions, effluents, and wastes
7 from all of our existing stations.

8 Q. They asked for studies which would
9 provide them with such information, together with other
10 sources. That is what this question is.

11 A. That is correct.

12 Q. Looking at page 101, this is
13 Interrogatory 11.26.28.

14 THE REGISTRAR: That is .40

15 ---EXHIBIT NO. 683.40: Interrogatory No. 11.26.28.

16 MS. MARLATT: Q. And the response to
17 this interrogatory:

18 "Ontario Hydro has not identified
19 generic thresholds to acceptable
20 environmental effects."

21 Skipping down a sentence:

22 "Determination of acceptable and
23 unacceptable environmental effects will
24 be made through a process of public
25 government and stakeholder involvement at

1 each project Environmental Assessment
2 stage."

3 Ms. Howes, would you agree with me that
4 it would have been possible to have a debate about
5 certain acceptable and unacceptable effects,
6 environmental effects, of Ontario Hydro's planning
7 process?

8 MS. HOWES: A. The environmental effects
9 of our planning process?

10 Q. The results of the activities that
11 you foresee Ontario Hydro being involved with over the
12 next 25 years.

13 A. Well, I think this particular forum
14 that we are currently involved in does discuss in a
15 generic sense what the environmental effects will be.
16 I think, though, that in order to get an appropriate
17 handle on what carrying capacity or acceptable
18 threshold levels would be, it is very important to look
19 at the ecosystems affected. And I would suggest that
20 that is most appropriately done on a site-specific
21 stage where you, indeed, have a geographic basis for
22 consideration.

23 Q. Would you agree with me, Ms. Howes,
24 that information, and you may argue that it should be
25 done on a project level, but let's talk about at a

1 planning level. Would you agree that information that
2 individuals and groups could provide within regions
3 about overall incremental impacts that they have
4 experienced would be useful to you?

5 A. Yes, I think it would be useful. I
6 would, as you suggested, argue that on a project-
7 specific basis that would be most appropriate. And I
8 think that particular approach is what was intended as
9 part of the co-planning process for the Moose River
10 Basin, for example.

11 Q. And one of the examples we could put
12 forward, page 96, this is from Volume 152, page 26930.
13 It is a question there by Mr. Greenspoon.

14 "But if just hypothetically, if the
15 Serpent River basin has reached its
16 carrying capacity or far exceeded it,
17 there is nothing Ontario Hydro can do
18 about it.

19 ANSWER: That's probably true.

20 QUESTION: But it may be a burden on the
21 people of the Province of Ontario.

22 ANSWER: It could well be."

23 Would you accept that that is an example
24 of carrying capacity of a region of Ontario?

25 A. No. I would suggest that if there

1 were, indeed, developments proposed in that area that
2 one would certainly have to consider all of the
3 environmental implications of past developments. And
4 one may well determine that the Serpent River, for
5 example, has achieved a carrying capacity. But at this
6 point, this was a purely hypothetical statement. But
7 it would have to be considered in certainly
8 site-specific evaluations.

9 Q. Ms. Howes, looking at page 99,
10 Interrogatory response 10.4.28.

11 THE REGISTRAR: .41.

12 ---EXHIBIT NO. 683.41: Interrogatory No. 10.4.28.

13 MS. MARLATT: Q. I had just one question
14 about your response. Looking at the second page of the
15 response, under the Migratory Birds heading, about
16 halfway down the first paragraph, there is a sentence
17 there that states:

18 "...the thermal discharges may provide
19 both improved micro-climate and increased
20 numbers of forage fish (for fisheating
21 water fowl). On Lake Erie and Lake
22 Huron, the thermal discharges also offer
23 local ice-free conditions during years
24 when the rest of the lake freezes over."

25 Ms. Howes, are you aware whether or not

1 there have been any impacts on the ability for people
2 to conduct ice fishing activities in those areas?

3 MS. HOWES: A. I am not familiar with
4 any ice fishing activities around our stations, per
5 say. I mean, obviously, there are ice fishing
6 activities on Lake Erie. I'm not sure about Lake
7 Huron. I would suggest, though, that because,
8 particularly in the Bruce area we do have community
9 groups that if, indeed, it was affecting ice fishing in
10 the area, we probably would have heard about it and
11 investigated it and done something about it. But it is
12 generally around the outfall. This is quite localized.

13 Q. Are you aware of ice fishing
14 activities in the North Channel area? Is that
15 something you are familiar with?

16 A. Personally familiar with?

17 Q. Personally familiar with.

18 A. No, but I would not be surprised
19 because I grew up in Northern Ontario.

20 Q. You would not be surprised there
21 would be ice fishing activities in the North Channel.

22 A. That's right.

23 Q. Ms. Howes, are you aware of
24 negotiations that are occurring in Ontario between
25 First Nations and both levels of government with regard

1 to resource management agreements?

2 A. I have some knowledge, yes.

3 Q. You are aware that those negotiations
4 concern constraints; part of the negotiations concern
5 constraints that may occur on traditional lands, First
6 Nations.

7 A. Yes, I think that is specifically
8 with reference to wildlife strategies, for example.

9 Q. So these may act as planning or land
10 use constraints in the long-term.

11 A. They could well, yes.

12 Q. For the Province of Ontario.

13 A. Yes.

14 Q. And that is something that Ontario
15 Hydro will have to take into account?

16 A. Yes. And you had asked something
17 very similar yesterday, and at the time I had forgotten
18 that as part of our hydraulic plan, for example, in
19 determining sites that have economic potential, one
20 consideration was various land-use constraints in the
21 North. So that was considered as part of our
22 determination of hydraulic sites.

23 Q. With regards to other options, would
24 that be on a list of potential constraints that Ontario
25 Hydro may have?

1 A. Yes, I would agree that there are
2 constraints to locating virtually all of our generating
3 stations within the province.

4 Q. And it may be somewhat like the
5 situation you are faced with regulations where you are
6 not sure how stringent the regulations will be in the
7 future, you are not sure how stringent the constraints
8 may be on your planning activities for Northern
9 Ontario.

10 A. I wouldn't use that as a parallel.
11 But I would agree that yes, one has to consider other
12 land uses. And yes, there may well be constraints to
13 locations, yes.

14 MS. MARLATT: Thank you. Those are all
15 my questions.

16 THE CHAIRMAN: Thank you, Ms. Marlatt.
17 Thank you.

18 [10:50 a.m.]

19 THE CHAIRMAN: Who is next?

20 MR. ANSHAN: Mr. Chairman. My name is
21 Mark Anshan, I represent CAESCO at these hearings.
22 This is the first time that we have actually
23 participated in cross-examination, so I thought I would
24 introduce myself to the panel and to the Board.

25 THE CHAIRMAN: Your client is again?

1 MR. ANSHAN: CAESCO, the Canadian
2 Association of Energy Service Companies.

3 I have a short cross-examination. I
4 don't expect to take more than 20 minutes. However, I
5 have not been able to be here for most of the
6 cross-examination, in fact all of the cross-examination
7 on Panel 10 because I have been across the street at HR
8 21, and so I hope the Board and panel will forgive me
9 if I ask a couple of questions that maybe somewhat
10 repetitious and because I have not been here and I have
11 not had the benefit of looking at the transcripts
12 either, I have been tied up. And if I do cross the
13 line, I am sure that somebody will bring that to my
14 attention.

15 My questions will also concentrate mostly
16 on the demand management plan, but with particular
17 reference to energy performance contracting and the GEP
18 program, so I am not sure which member of the panel
19 would be most appropriate to answer those, and I will
20 leave it to the panel to decide that.

21 CROSS-EXAMINATION BY MR. ANSHAN:

22 Q. If I could turn to Exhibit 452, page
23 8, which is the Update '92, and I would just like to
24 briefly revisit an area which was the subject of
25 cross-examination by Mr. Rodger.

1 In the first paragraph of course it
2 indicates that the demand management targets have been
3 changed as a result of the Update, so that now we are
4 looking at 5,200 megawatts for the year 2000, and 9,860
5 megawatts for the year 2014. That still is the
6 projected targets for demand management.

7 The second paragraph, and this is an area
8 that Mr. Rodger was asking about the other day, refers
9 to the uncertainty factors to which affect the success
10 of the demand management programs, and the last
11 sentence indicates that the uncertainties can be
12 estimated only on a broad judgmental basis, and there
13 was some discussion with Mr. Rodger about that phrase.

14 I would just like to ask the panel what
15 assumptions or judgments were applied to arrive at the
16 targets for each of the years 2000 and 2014?

17 MR. SHALABY: A. The considerations that
18 went into arriving at the targets that you just
19 mentioned are documented in various exhibits that were
20 discussed in Panel 4. 267 and 268 are the exhibit
21 numbers that I remember -- 257 and 258. And much of
22 the testimony of Panel 4 concerned the estimation of
23 potential and the steps we have taken to go from
24 potential to actual realized potential that we can
25 achieve at a certain time.

1 Q. And those, the factors indicated in
2 those two exhibits, they haven't changed significantly
3 since those exhibits were filed and cross-examination
4 took place on them; is that correct?

5 A. The minor change I mentioned is the
6 reduction now in our estimate of load shifting and
7 discount demand service. The planning numbers are
8 lower, but the targets remain at 5,200 by the year
9 2000.

10 Q. Thank you. Is it true that the
11 entire mix of demand management programs to reach these
12 declared targets have not yet been designed?

13 A. Not all of the mix has been designed,
14 you are correct.

15 Q. And that will be an ongoing process,
16 I take it, in the years to come--

17 A. Yes.

18 Q. --as new technology comes on stream
19 and existing technology is reviewed and evaluated and
20 changes are made to the present programs, new programs
21 are developed in response to the experience with
22 existing demand management programs; would that be
23 correct?

24 A. That is correct.

25 Q. If that's true then, what was the

1 process used by Ontario Hydro to actually determine the
2 targets for 200 and 2014? In other words, you are not
3 really sure what kind of demand programs you are going
4 to have eight years out, 10 years out, it's really, I
5 guess, not a very precise science, is it?

6 A. The process is unrelated to programs.
7 Programs is how, for example, you will reach the
8 hospitality sector and promote efficient lighting or
9 refrigeration, for example.

10 The potential estimation process is how
11 many hotels and motels are there and how much
12 refrigeration and lighting takes place in those
13 establishments. And it's that kind of activity that we
14 have taken into effect so far, is to estimate how many
15 square feet, how often do they operate, how much demand
16 is there, and the potential for reduction.

17 Now, the program is now how do you get to
18 them, how do you promote the efficiency, how do you
19 deliver the programs, that is the part that is evolving
20 and continues to be worked out.

21 Q. It must also then take into account
22 future economic growth within the province in terms of,
23 you mentioned square footage, well, there will be
24 continued buildings being built in the future--

25 A. Yes.

1 Q. --down the road?

2 A. Yes, all those factors are taken into
3 account.

4 Q. Are taken into account?

5 A. Yes.

6 Q. You are familiar with energy
7 performance contracting?

8 A. Familiar with the concept but not the
9 details.

10 Q. Are you familiar with the GEP program
11 in Ontario Hydro?

12 A. Again, the concept but not the
13 details.

14 THE CHAIRMAN: What was the program?

15 MR. ANSHAN: Sorry, Mr. Chairman. The
16 Guaranteed Energy Performance Program.

17 Q. That's a demand management program of
18 Ontario Hydro just initiated I guess about a year ago
19 and is up for review at end of 1992, I believe.

20 MR. SHALABY: A. That doesn't surprise
21 me. That's about right.

22 Q. And it's a program, the purpose of
23 which is to help kickstart, if you will, or increase of
24 the level of activity in energy performance contracting
25 with regard to energy management and to help that

1 industry grow and develop and make what we anticipate
2 will be a considerable contribution to demand
3 management; is that correct?

4 A. I think that's the impact on the
5 industry you are representing, but the objective from
6 Ontario Hydro's and our customer's point of view is to
7 get demand management and to increase the efficiency of
8 certain parts of the commercial and industrial
9 establishment.

10 Q. Energy performance contracting is
11 based on the pay for poor performance principle; is
12 that correct?

13 A. That the principle, yes.

14 Q. As opposed to incentives which are
15 given for other demand management programs which don't
16 necessarily have a guaranteed savings in your programs?

17 A. That is the principle, yes.

18 Q. Could you tell me what percentage of
19 the targets for each of the two target years we have
20 mentioned, the year 2000 and the year 2014 are
21 attributable to energy performance contracting?

22 A. I think we just finished saying that
23 the details of how the targets will be delivered have
24 not been worked out. So actually, whether it will be
25 delivered by standards or by incentives or by

1 guaranteed energy performance contracts, all of that
2 will continue to evolve. I don't think these numbers
3 have been worked out.

4 Q. In order to work out those specifics,
5 will there be some level or form of consultation with
6 the various stakeholders or representatives of the
7 various industries attributed to each of these demand
8 management programs?

9 A. Yes.

10 Q. Do you have any plans in place for
11 that level of consultation and analysis?

12 A. I think that's an ongoing matter. We
13 discuss the importance of partnership in demand
14 management, working with customers and working with
15 architects, engineers, energy service companies,
16 government legislators and regulators. So the concept
17 of partnership with many stakeholders is a central
18 theme in delivering demand management.

19 Q. Can we assume that the demand
20 management targets that we are talking about might
21 change in the future based on changing circumstances?

22 A. They have changed in the past and
23 there is no reason to think they will not change in the
24 future.

25 Q. So would it be correct to say that

1 these targets are subject to periodic review by the
2 corporation?

3 A. Yes.

4 Q. And what would be the process for
5 that periodic review?

6 A. We have an annual business planning
7 cycle, that probably would be the closest I can think
8 of, of the process of reviewing those targets.

9 Q. You may have already answered this,
10 and if you have, you certainly will tell me. It's a
11 fairly extensive question.

12 How will the demand management targets
13 that you have be kept relevant and how will the
14 stakeholders be kept fully advised about what Ontario
15 Hydro's expectations are or will be in the future, in
16 order that the stakeholders can assure that their
17 participation is accepted as a central element to the
18 successful attainment of those targets?

19 A. I think the expectations are
20 documented in communication with the stakeholders,
21 documents that describe Ontario Hydro's demand
22 management plans and many other corporate plans.
23 Workshops, seminars, regular meetings associated with
24 various stakeholders, industry related, whether it's
25 the construction industry conferences or publications,

1 those are vehicles for communication with stakeholders,
2 and there are many, many of those.

3 Q. You mentioned before that you don't
4 know the detail of regarding the GEP program. Do you
5 have understanding as to how that program evolved and
6 came to fruition at Ontario Hydro?

7 A. Again, my understanding of the
8 concept, it is something that is followed in other
9 jurisdictions, and companies have operated elsewhere in
10 the United States and have come to Ontario offering
11 their services. They will deal with a client, for
12 example, an operator of a shopping centre or an
13 operator of an office building. They will audit and
14 implement energy management improvements, and based on
15 the measured savings, Ontario Hydro would pay certain
16 amounts of -- 10 cents per kilowatthour is my
17 understanding, for the first year of savings, as an
18 incentive to the energy management company working the
19 client. That is roughly the concept and how it came to
20 fruition.

21 Q. What I was trying to get at is, what
22 level of consultation was taken with the industry in
23 developing the GEP program, particularly as you have
24 just mentioned one of the incentive rates, the other
25 incentive rate, I believe, is 700 per kilowatt saved?

1 A. Yes.

2 Q. And I am just trying to get a sense
3 of how the industry was consulted or not consulted in
4 developing the program, the detail of the program and
5 the incentive levels. You don't have that information?

6 A. I don't have firsthand knowledge of
7 that.

8 Q. I am nearing the end. Is Ontario
9 Hydro planning or considering the establishment of an
10 energy service company as part of its demand management
11 program?

12 A. I don't have knowledge of that.

13 Q. Do any of the members of the panel
14 have knowledge of that?

15 Would it be possible to get an
16 undertaking as to determine whether or not there are
17 any plans in the corporation for the establishment or
18 consideration of such an ESCO?

19 MR. B. CAMPBELL: Well, Mr. Chairman, I
20 am not sure how it's very helpful to the Board. I know
21 my friend has been crossing the energy management panel
22 over at the Ontario Energy Board for a considerable
23 period earlier in that hearing which continues.

24 I think if that was an important manner,
25 he might better have raised it there. I don't see how

1 it's relevant to this hearing and I am reluctant to
2 take on undertakings that I don't see being of clear
3 benefit to this Board.

4 MR. ANSHAN: If I may respond, Mr.
5 Chairman. I seem to be getting bumped back and forth
6 between two different hearings.

7 One, I think the development of and ESCO
8 by Ontario Hydro could be quite relevant or impact
9 considerably on demand management targets.

10 THE CHAIRMAN: On a what, I'm sorry?

11 MR. ANSHAN: Development of an ESCO, an
12 energy service company by the Corporation could be a
13 relevant factor in determining whether or not Ontario
14 Hydro can meet its demand management targets. So I
15 think it is quite relevant to the consideration this
16 Board, particularly with respect to Update 1992.

17 All I am trying to determine is as to
18 whether or not the Corporation has thought about the
19 development of such a corporation, or whether it will
20 give consideration to it. I would think that within
21 this Corporation there ought to be somebody who has
22 knowledge --

23 THE CHAIRMAN: They probably can tell you
24 whether they thought about it. Whether they can tell
25 you whether they will give consideration to it is

1 another question.

2 MR. SHALABY: In the area of thinking
3 about it, I hazard to say we must have thought about.
4 There is a lot of people in energy management and
5 elsewhere that are thinking of all kinds of mechanisms
6 of implementing demand management. So I hazard to say
7 it must have been a thought that was contemplated.

8 But I don't know to what extent it's
9 going to be a proposal that Hydro will act on.

10 THE CHAIRMAN: Is it part your present
11 plans?

12 MR. SHALABY: Not to my knowledge, no.

13 And I think the theme of partnership with
14 private industry and with operators, our experience in
15 delivering management, I don't know what room there is
16 for Hydro to create an energy service company. I don't
17 know whether there is a void in the market that Hydro
18 can fill or what, I have no idea.

19 MR. ANSHAN: Q. That leads me actually
20 precisely to the point because if in fact there was
21 some indication of planning or not planning, I was
22 going to then ask the question, what factors would be
23 necessary to be in place in order for Ontario Hydro to
24 consider such a venture?

25 MR. SHALABY: A. That is a detailed

1 question that I can't help you with, I'm sorry.

2 Q. And again, would there be any
3 willingness on the part of the Corporation or counsel
4 for the Corporation to undertake to give us perhaps a
5 list of criteria or factors that Ontario Hydro would
6 consider as to whether or not it would establish an
7 ESCO.

8 MR. B. CAMPBELL: Well, Mr. Chairman, I
9 think there was an enormous amount of evidence in
10 cross-examination in Panel 4 on the kind of approaches
11 that Hydro anticipated taking. Ms. Fraser I know spoke
12 to all of these kind of matters. I don't know whether
13 this specific question came up in all of it. You have
14 heard from Mr. Shalaby and I think it echoes Ms.
15 Fraser's response on Panel 4, that Ontario Hydro - and
16 Mr. Wilson's testimony on Panel 4 - that Hydro was
17 looking for any good ideas and opportunities to pursue
18 its demand management objectives.

19 I am just reluctant to take on, as I say,
20 undertakings which, I think given the evidence in Panel
21 4 and the detail that was gone into, that really can't,
22 in my submission, be of great assistance to the Board
23 in dealing with the questions it has to deal with it.

24 Site-specific questions are a level of
25 detail that the Board does not want to go into. We are

1 way past that level of detail on this kind of question
2 and it's equivalent area.
3 ---Off the record discussion.

4 THE CHAIRMAN: I sort of cut you off
5 because I had a conference to my colleagues, but do you
6 want to respond to Mr. Campbell?

7 MR. ANSHAN: No, I was sort of interested
8 as to what the result of the conference was going to
9 be. [Laughter]

10 But I did want to make one point on that,
11 if I may, Mr. Chairman, and that's the reason this
12 issue didn't really arise in Panel 4 is because the
13 targets were different than they are now for energy
14 management and now these targets --

15 THE CHAIRMAN: No, I am sure that's not
16 quite correct. I think these targets were part of the
17 Panel 4 evidence and were one of the driving forces
18 that lead to the Update. These targets were part of 4.

19 I think I am right about that, am I, Mr.
20 Shalaby.

21 MR. SHALABY: You are.

22 MR. ANSHAN: Q. Is not the 5,200
23 megawatt a new target figure for the year --

24 MR. SHALABY: A. But it was presented by
25 Panel 4.

1 Panel 4 essentially broke the news and
2 presented that here first.

3 Q. The only point I was trying to make
4 is that I think some of the suggestions we are trying
5 to make in this cross-examination could assist the
6 Board in determining whether or not these targets could
7 be met in terms of this consideration, but I think I
8 have made the point and we will leave it for argument
9 later on.

10 You are familiar with the non-utility
11 generation, Mr. Shalaby?

12 A. Both myself and Mr. Snelson are, yes.

13 Q. And non-utility generation, as I
14 understand it, is defined by the Corporation to include
15 generation produced by a private organization or
16 company, which generation is also connected to the
17 Ontario Hydro grid; is that correct?

18 A. Essentially correct. It doesn't
19 necessarily have to be a private corporation.
20 Municipalities or public corporations can also be
21 non-utility generators.

22 Q. But the feature of its connection to
23 the grid is an essential feature of that definition;
24 is that correct?

25 A. There are definitions of grid

1 connected non-utility generation and non-grid
2 connected. We can go into categories. Some are grid
3 connected but for most purposes the non-utility
4 generations are connected to the grid.

5 [11:12 a.m.]

6 Q. So in other words, the definition as
7 used by the non-utility generation division would
8 include projects not connected to the grid.

9 A. It could include that. The ones that
10 come to mind would be projects in isolated communities,
11 for example, that may not be connected to the bulk
12 electricity system. Or as we heard in Panel 8, there
13 are some people who are building either farms or
14 cottages that are totally independent and will generate
15 their own power and not be part of the grid.

16 Q. And, therefore, would be considered
17 NUGs for the purposes of Ontario Hydro's activities, or
18 not?

19 MR. SNELSON: A. I am not entirely clear
20 on the point. But I believe that Mr. Shalaby is
21 correct that a non-utility generator on a remote
22 community electricity system which Ontario Hydro
23 operates is definitely considered a non-utility
24 generator. But I suspect that a person with a windmill
25 on his cottage which is on an island in the middle of

1 the lake and not connected to anything is probably not
2 considered non-utility generator. But I'm not entirely
3 clear on that point.

4 Q. Well, let me take it one step farther
5 if I can. In retrofitting a building, an energy
6 service company -- I'll give you a scenario. An energy
7 service company comes along and retrofits a large
8 commercial building, perhaps something like the
9 building we are in today; and as part of that retrofit
10 suggests that the building can generate its own
11 electricity through using gas and supply its own energy
12 needs. Would that be considered a NUG, according to
13 your definition?

14 A. Very likely, yes. The typical
15 classification that sort of application falls into is
16 what we call load displacement non-utility generation.
17 And that is where an electricity customer generates
18 part of his own electricity requirement which reduces
19 the amount that he buys from Ontario Hydro. Even
20 though Ontario Hydro doesn't buy that electricity and
21 sell it back to him, it is still considered non-utility
22 generation and that is a load displacement non-utility
23 generation category.

24 Q. What if they were able to generate
25 enough electricity for all their requirements without

1 having to buy any energy from the Corporation; would
2 that still be considered a NUG project?

3 A. Typically, in that type of situation
4 they still want to be connected to the grid for backup
5 reasons and so on, and yes, they would be considered to
6 be non-utility generation.

7 Q. The Corporation is continuing with
8 NUG projects under 5 megawatts, is that correct?

9 A. Yes.

10 Q. Considering them under 5 megawatts?
11 And as part of the guaranteed energy performance
12 program, the GEP program, any part of the GEP program
13 that has a NUG component to it has to be applied
14 through the NUG division of Ontario Hydro, is that
15 correct?

16 MR. SHALABY: A. I don't know the
17 details of that, but I suspect you are correct.

18 Q. I guess my question is why that
19 wouldn't be viewed as part of the demand management
20 activities of Ontario Hydro as opposed to the NUG
21 activities when it is part of the GEP program?

22 A. I guess we indicated to Mr. Shepherd,
23 I believe, when he was mentioning the example of
24 hospitals, putting chillers together with cogeneration.
25 The proposal you are mentioning has some

1 characteristics that are energy-management related and
2 some characteristics that are non-utility generation
3 related. And it is really who administers the program
4 is something that could evolve one way or the other.

5 But right now cogeneration is a
6 non-utility generation responsibility and energy
7 savings is a demand management responsibility. Whether
8 that will change are whether that is a sensible thing
9 to do, I believe if it becomes an obstacle to the
10 implementation of comprehensive package, Hydro's intent
11 is to make it easier for service companies to do their
12 business.

13 Q. Would you agree that right now if,
14 ESCO, an energy service company, came forward with a
15 comprehensive application for a retrofit that had
16 energy management components and NUG components, the
17 application would get split off to both divisions for
18 consideration? Is that how it would work?

19 A. My belief is that is the case right
20 now. I am not 110 per cent sure on that one. But that
21 is my belief at this time.

22 Q. And, therefore, the incentive levels
23 or the kind of financing arrangements for each
24 component would be different and treated differently;
25 is that correct?

1 A. If it is split and went two different
2 routes, that would be the case.

3 Q. And that could have an effect on the
4 overall cost of the retrofit or the project, given the
5 different -- there might be variations or discrepancies
6 between the financings and the support arrangements?

7 A. I don't know if it would have an
8 affect on the cost of the project. It would just run
9 people crazy trying to chase two different places in
10 Hydro and chase two applications in two different
11 streams. I think it would just be a bureaucratic
12 inconvenience.

13 I expect that Hydro, if that becomes a
14 prevalent demand management initiative, will do
15 something to correct that and to make it customer
16 oriented and more convenient for the proponents to deal
17 with, if it is more convenient to deal with one entity
18 to do so. Or that we do our work in two different
19 divisions but the contact between the customer and
20 Hydro could perhaps be consolidated in one place.

21 These are speculations on my part that I
22 have seen evolve in Hydro, that when something that is
23 hybrid, like this proposal, comes up, at times we start
24 up dealing with it as a split proposal but then it
25 becomes evident that we have to put it together

1 somewhere.

2 Q. But I take it from what you've said
3 that it is certainly much easier for the customer, in
4 this case, the representative from ESCO or an ESCO to
5 deal with one unit or one party in Ontario Hydro rather
6 than two or possibly three parties.

7 A. Yes.

8 Q. So that will certainly be looked at
9 in the development of these programs.

10 A. That is my speculation and my
11 expectation, yes.

12 MR. SNELSON: A. My understanding is
13 that in the regional offices there are common people
14 who can assist in dealing with having one contact with
15 a customer or an energy service company for such a
16 proposal and can then deal with that on a unified basis
17 and have the necessary dealings with the energy savings
18 people for the demand management component and the
19 non-utility generation people for any non-utility
20 generation component. But the real expertise on this
21 type of issue is really on Panel 4.

22 MR. ANSHAN: Thank you very much, panel.
23 Thank you very much, Mr. Chairman. I would like to
24 just point out that my cross-examination here was
25 somewhat less than over at HR 21 in spite of what my

1 friend was thinking.

2 MR. B. CAMPBELL: I recognized that it
3 was less. I am so advised.

4 MR. ANSHAN: Thank you.

5 THE CHAIRMAN: Who is next, Mr. Thompson?
6 Are you ready to proceed?

7 MR. THOMPSON: Yes, sir. When I see all
8 the empty chairs in the room I feel a little bit like
9 the last act on amateur night.

10 MR. B. CAMPBELL: Am I allowed to tell my
11 panel not to be lulled into a false sense of security
12 in that regard?

13 MR. THOMPSON: I didn't think you were
14 allowed to give them advice, Mr. Campbell.

15 MR. B. CAMPBELL: I'm not. Go ahead and
16 ask the questions.

17 MR. THOMPSON: My cross-examination this
18 morning is maybe going to be on a little different
19 approach than some of the others. We have heard
20 semantics and so on. I am going to be, I guess,
21 looking a little more at philosophy. Now, just for
22 your reference I indicated that I would be referring
23 only to Exhibit 452 in my cross-examination.

24 CROSS-EXAMINATION BY MR. THOMPSON:

25 Q. Now, panel, given what I have been

1 reading and what I have been hearing and my
2 understanding of management styles and philosophies and
3 so on, would the change from planning to upper load
4 growth to planning around the median reflect not just a
5 change in the method of planning but more than just a
6 moderate or subtle change in the way Ontario Hydro does
7 business? Are we seeing something of a change in
8 management style and philosophy, as well?

9 MR. SHALABY: A. I think management
10 style and philosophy changed for many other reasons,
11 not primarily the planning to the upper and planning
12 around the median. But to address the significance of
13 that change, I think I indicated in direct evidence,
14 think of planning around the median as a way of
15 managing uncertainty.

16 Hydro has managed uncertainty in the past
17 and will continue to do so in a very similar way to the
18 way it has done it in the past with one exception; that
19 one exception is not seeking approvals for major supply
20 that would be needed for upper load growth.

21 Q. Okay.

22 A. So in my mind, a lot of the
23 management of uncertainty philosophies and portfolio,
24 as we call it now, are in tact. We used to rely on
25 that for ages and we will continue to rely on that.

1 One component now is not part of that portfolio and
2 that is seeking approvals that would be necessary in
3 the case of upper. And that is the major supply
4 approvals at this stage.

5 Q. I guess I am asking the question sort
6 of in order to keep, the way my clients would think is
7 that if I were to sit here and pretend I was on the
8 board of directors of Hydro, which is a farfetched but
9 not impossible situation.

10 A. You were Minister of Agriculture the
11 last time you were here, so -- [Laughter]

12 Q. I think that being on the board of
13 directors of Hydro is probably a little bit more secure
14 position, maybe not as safe. These are the sort of
15 questions that if I were on the board I would ask.

16 Just from what I have heard, it looks
17 like there has been a change in philosophy, that you
18 are accepting more risk, you are looking at things a
19 little differently, a different style, a different
20 philosophy, and so on. I think from what I hear you
21 saying is that yes, we have changed, but just ever so
22 slightly; is that fair?

23 A. On this question, in my own mind we
24 have changed slightly or a component of managing
25 uncertainty has changed. I think what is in common is

1 a lot more than what is different. That is how I would
2 say. What remains in common with the original approach
3 is far larger than what is different today.

4 Q. Maybe I have been reading more into
5 other intervenors cross-examination than what is
6 actually there, is that a --

7 A. People have focussed on the
8 difference rather than on what is common, yes.

9 Q. All right. I seem to recall it being
10 said, and I think you have just said this now, that
11 planning around the median is a willing to accept and
12 manage greater risk. And I think that what you said,
13 the risk is involved in a planning risk of sorts.

14 Because you are willing to accept and
15 manage and cope with more risk, would it be fair to say
16 that you are now playing somewhat more of a hotter game
17 than what you have been before? You have to have more
18 of an ability to recognize and act on things than what
19 you may have had previously.

20 A. I would characterize the risks to be
21 of different nature than the risks we have taken with
22 the previous approach. The previous approach also had
23 risks, perhaps of a different nature than the risks we
24 are taking now. So neither approach were risk-free.
25 And the nature of the risk we are taking now is

1 different than the risk that we took before.

2 Whether it is more or less, it is in
3 different areas and it is against different
4 contingencies. I don't think we are putting our
5 customers at any greater risk than we were before. But
6 the risks in planning are of different nature. That is
7 my perspective on it.

8 Q. Just on that, Mr. Snelson referred in
9 direct evidence and in response to one of the
10 intervenors questions on page 26544 where, if I am
11 correct, the planning risks involved mainly changes in
12 demand for electricity and gas prices.

13 Is this effectively correct as to what
14 you see the major planning risks to be?

15 MR. SNELSON: A. No, I don't think
16 planning risks are confined to those. I was asked to
17 identify what additional risks we were accepting by the
18 planning around the median approach. And I believe
19 Exhibit 452 has a reference to increased risk.

20 And I used as an example that with
21 planning around the median we are at increased risk in
22 the event that there is higher load growth and higher
23 natural gas prices because the responses that we are
24 relying upon to meet higher load growth are principally
25 responses that are fueled by natural gas, whether they

1 are Ontario Hydro natural gas-fueled options or
2 non-utility generation fueled natural gas-fueled
3 options.

4 [11:27 a.m.]

5 So the area where the risk is increased
6 and the one area that's easy to see, is that the
7 combination of high load growth and high natural gas
8 prices, the risk is somewhat higher.

9 Q. So as I think I heard you saying, the
10 incremental risk involved in this change is the risk of
11 having the demand change and the gas prices change.
12 The reason I referred to it as planning risk is this
13 the risks involved with the change in your planning,
14 and not to put the dictionary terms on it, but just so
15 I can understand it.

16 A. That is the clearest one to see, yes.
17 There may be some others, but that is the clearest one.

18 Q. Okay.

19 MR. B. CAMPBELL: Mr. Thompson, I think
20 you sort of phrased that somewhat differently from Mr.
21 Snelson. Mr. Snelson's answer was in relation to the
22 combination of those two. I just want to be clear in
23 that in asking your questions that you are
24 characterizing it fairly.

25 MR. THOMPSON: Q. Just so I understand.

1 It's a combination, then, of the demand risk and the
2 price risk?

3 MR. SNELSON: A. Yes, I believe I was
4 clear on that point.

5 Q. Okay. I may not have heard
6 correctly. I wasn't going to continue on, on that
7 point, I just wanted to make it clear that the
8 incremental risks were some combination of these two
9 and the nothing more rides on that.

10 Just before we go on the break, I am
11 going to pose another question. That by changing
12 philosophy or style by changing your reaction time, or
13 whatever it is that we read about, I am going to
14 identify or suggest to you that there is an increased
15 risk of another type and ask you to comment on it, it's
16 what I would call the operational risk. That the risk
17 of being able to identify a trend and being able to
18 know it's there, but for some reason or another not be
19 able to act on it. The example I can think of is
20 something like a super tanker, you have got the best
21 radar equipment, the best direction-finding devices you
22 have got, you are able to plan exactly where you are
23 going, you know exactly where you are going all the
24 time, you know exactly what is out there.

25 But because of the size and nature of the

1 organization, in this case being the super tanker, your
2 ability to react is somewhat limited. I am just not
3 too sure. I understand and appreciate your comments
4 about planning, but I guess my concerns are more along
5 the lines of can you react? Is the risk that we have
6 talked about earlier of having gas prices change and
7 demand prices change only small part of overall
8 management structure, and can you or do you think that
9 you can adapt quick enough?

10 A. That is also a concern in planning
11 and it comes down to the question of length of time to
12 recognize a trend, which is an internal thing, and then
13 the length of time it takes you to implement the change
14 once you have decided that change is necessary, and
15 that's the lead time of whatever action it is you are
16 proposing to take. And that lead time is partly a
17 fundamental characteristic of whatever action you are
18 going to take is the lead time to construct and build
19 an operation, build a generation plant if that's what
20 the case is your considering. And also in that lead
21 time is the length of time it takes you to get the
22 necessary approvals and permits to permit you to start
23 the construction of the facility, and that's partly
24 under Ontario Hydro's control and it is partly outside
25 Ontario Hydro's control.

1 The planning to the upper type of
2 approach seeks to provide increased flexibility by
3 ensuring that the approval processes are under way in
4 good time for the long lead time options that thereby
5 reduces your response time.

6 Planning around the median approach is
7 predicated on the expectation that the shorter lead
8 time options will be sufficient to cover the risks that
9 you face, at least for the length of time to cover both
10 the approval and construction process of a longer lead
11 time option.

12 And so it is a reliance a recognition
13 that there is more shorter lead time options available,
14 and that because of the current situation of demand and
15 expected resources, there is less likelihood of needing
16 a great amount of additional resources, and that we can
17 afford to rely upon those short lead time options for
18 some considerable period of time.

19 MR. THOMPSON: I think this would be an
20 appropriate time for the break, Mr. Chairman.

21 THE CHAIRMAN: Thank you, Mr. Thompson.

22 We will break for 15 minutes.

23 THE REGISTRAR: Please come to order.

24 This hearing will recess for 15 minutes.

25 ---Recess at 11:35 p.m.

1 ---On resuming at 11:50 a.m.

2 THE REGISTRAR: Please come to order.

3 This hearing is again in session. Please be seated.

4 THE CHAIRMAN: Mr. Thompson?

5 MR. THOMPSON: Thank you.

6 Q. Just to follow up a little bit on the
7 answer to the last question. Just to make it perfectly
8 understandable, again to use the example if I were on
9 the Hydro board, the two things about risk or the two
10 things that I guess concern me about the changes I have
11 seen in the update so far are, firstly, the thing that
12 we just talked about, the risk of Hydro's abilities to
13 identify and act on stimuli, and secondly, the risk of
14 inability to act due to outside forces, things beyond
15 your control like legislative and/or judicial delays.

16 These two things worry me far more than
17 your ability to plan. I have perfect confidence in
18 your abilities to plan, but again with my understanding
19 of the way the organizations work, planners aren't
20 always or aren't often the people who make things work.

21 So could you give me some reassurances, I
22 guess, or some comfort that -- and I think Mr. Snelson
23 partially addressed some of the concerns in his answer,
24 but could you just give me some reassurances that in
25 fact your organization can and will be able to meet and

1 cope with these two risks that I am concerned about?

2 MR. SNELSON: A. The two risks are the
3 ability to --

4 Q. The ability to actually act.

5 A. Yes.

6 Q. You as planners are able to, as I am
7 confident, recognize and say to the people, "Hey, here
8 is what we need to do." Then you go to the line people
9 in your organization and say, "Make it happen." I am
10 oversimplifying.

11 But it is just that as planners I would
12 suspect that you may not be responsible for getting the
13 things done that you see need to be done.

14 So I just want to make sure that things
15 are going to get done both internally and externally.

16 You may not be able to give us any
17 guidance at all as to what you might do as an
18 organization to overcome any risks of delays due to
19 legislative and/or judicial problems.

20 A. I think both areas of concern that
21 you express are significant areas of concern that we
22 have to be able to address, and that was the situation
23 both before the Update and after the Update.

24 The ability to act internally is the
25 responsibility of Ontario Hydro and we attempt to do

1 our best, to do that as a whole organization, not just
2 the planners, it is the whole organization.

3 The degree to which our ability to act
4 internally is constrained by external matters is, to
5 some degree, out of our control, but we do our best to
6 work with environmental approval processes, with
7 consultation with the interested stakeholders outside
8 of the organization, to be able to put our plans into
9 action. But these are challenging areas. They are
10 areas that we do have to address and we had to do it
11 before the Update and we have to do it now.

12 Q. I think the one question that I would
13 have just as follow up to your answer; how much in your
14 judgment has this challenge - and I think that's your
15 word - how much has this challenge increased as a
16 result of the Update?

17 A. I don't believe that in this respect
18 it has an increased result of the Update. I think the
19 challenge was there before and it is there now, and I
20 don't think it is significantly larger now.

21 Q. All right. Okay.

22 I admit to some confusion about the
23 exchange between yourselves and Mr. Hunter regarding
24 certain portions of page 21 of Exhibit 452. The second
25 paragraph from the top, I think you, Mr. Snelson, and

1 Mr. Hunter were having some commentary about just what
2 this paragraph meant. And I admit, I was confused. It
3 seems to me when I read it, the first sentence, it's
4 simple and reasonable that a period of five years is
5 required to recognize and act on a fundamental new
6 trend line. Yet, I seem to recall you saying something
7 about illustrative.

8 Now just what does this sentence really
9 mean, just so I can be absolutely clear? The first
10 sentence of the second paragraph.

11 Does this in fact mean that, yes, it does
12 take us five years to recognize and act on a
13 fundamentally new trend line, or if not, just how long
14 does it?

15 A. The opening clause of the sentence
16 says, in order to provide an analysis, and continues, a
17 simple but reasonable starting point, and this is a
18 simplifying assumption for the purpose of analysis. It
19 is not exactly how the real world happens because
20 that's much more complicated and there is no easy way
21 of simulating exactly what happens in the real world.
22 But this is kind of an approximation.

23 The reality is that as things change and
24 evolve new trends emerge and they are recognized over a
25 period of time and actions are taken upon them as the

1 confidence that the new trend is there increases.

2 The simplifying assumption that is made
3 here is that essentially you don't see anything for
4 five years and then suddenly you see everything, which
5 is an approximation to a process in which the
6 realization of the new trend actually evolves through
7 time, and you do recognize some aspect of it for the
8 five years and you may not have completely recognized
9 it until after the five years.

10 Q. I guess my concerns were, and I think
11 Mr. Hunter maybe did a little bit as well, he said,
12 well, the first year you might notice something, the
13 second year you might notice something. And I
14 appreciate that it isn't a sort of eureka realization
15 at end of five years but it's an ongoing concern.

16 I guess the concerns that I had were the
17 fact that just when in your normal review process does
18 something come up that somebody recognizes, and then to
19 go back to my concerns about the organization's ability
20 to act in a timely fashion, I was just concerned that
21 in fact something might come up that you recognize in a
22 year but because of the internal organizational
23 structure you may not be able to recognize it and do it
24 for a much longer period of time, and that the
25 organizational structure which was suited to planning

1 to the upper might not be the same organizational
2 structure that would be responding to this new approach
3 in planning. And I think that was the concerns that I
4 had. And if I can get your comments on my concerns, I
5 would certainly appreciate it a little more.

6 A. On the planning to the upper approach
7 and the planning around the median approach, in both
8 cases load forecasts, long-term load forecasts are
9 reviewed generally every year, other forecasts of
10 economic variables are usually reviewed at least once a
11 year, fuel prices are reviewed once a year, and we go
12 through a business planning cycle where the new
13 forecasts are brought together and adjustments are made
14 to the activities of the Corporation particularly over
15 the next five years and to some degree over the next 10
16 years. This is an annual business planning process.
17 Also, long-term plans are modified, if necessary, based
18 upon the new information that becomes available.

19 So I think that there is a continuing
20 process of review. It is formalized in the business
21 planning process once a year, and there are instances
22 of decisions being taken and plans being changed in
23 between business planning cycles if something arises
24 that makes it clear that that change is appropriate.

25 Q. I have a question on that, two or

1 three questions down, but since we are at it I might as
2 well ask it. I am going to ask you if an annual
3 review is not often enough. Is a formalized annual
4 review effectively obsolete now that you are having to
5 recognize or change your plans possibly a little more
6 often to react to changed circumstances?

7 Is there something in Hydro or do you
8 have any review or any indication -- I suppose since
9 the Update was only announced in January you really
10 don't have any idea yet, but is it likely that we could
11 have some sort of review of this annual process to
12 update it? What comments would have on that?

13 I guess just to use an example, when I
14 first read this top of page 21 I said, well, we are
15 going to have decisions every three years and I
16 appreciate your comments about the five-year planning,
17 and I just sort of thought, well -- again, my first
18 impressions were maybe somewhat facetious, but I
19 thought, well, it's sort of like a drunk guy driving a
20 car. He has got three seconds to react but because
21 he's drunk it takes him five. And just by definition
22 it seems intuitive to me you are going to crash. I am
23 trying, in a fashion, to ask you questions just to
24 determine, and again I make no references at all or
25 disparaging comments about Hydro's abilities, but those

1 are my concerns, just based on the surface of things
2 and I want to you reassure me that you are not going to
3 crash, as it were.

4 A. Well, as I have indicated, we do
5 review things generally once a year. The Update Plan
6 was produced about two years after the Demand/Supply
7 Plan, and that was because there was seen a need to be
8 a fairly substantial change to the proposals, the
9 approvals put to this Board. In that intervening
10 period there had been such adjustments to some aspect
11 of longer term plans.

12 So it wasn't as though things were kept
13 entirely static for those two periods. The plans are
14 changing in their detail relatively frequently.

15 And as I say, the five years here is only
16 a convenience for analysis. That is a rough
17 approximation. We have to make some assumption like
18 that otherwise you can't do an analysis of how bad
19 things could be if you are wrong. If you got to
20 presume how long you are going to be wrong before you
21 come to a conclusion as to you should change your
22 course. But I think that's a fairly conservative
23 period.

24 Q. Several parties have mentioned part
25 of my next concern and the answer may have been given,

1 and if it has I apologize. But you have changed
2 somewhat in your outlook, and again I am asking this as
3 somebody who assumes I am on the Board again, what do
4 we have either as a member of the public or as a member
5 of a board except faith in your personal abilities and
6 Hydro's corporate conscience that you are going to make
7 this work, and you are not going to be back in 10 years
8 saying we can't make planning around the median work.

9 [12:06 p.m.]

10 My definition of a plan is something with
11 some sort of implementation and control and review and
12 monitoring procedures. Now, is there something that I
13 have missed in the evidence in cross-examination so far
14 or is it just too early in the process to be able to
15 make any of these decisions?

16 MR. SHALABY: A. I think what you have
17 adds to the confidence of what you said, there is an
18 80-year track record of this company providing reliable
19 service and good service to its customers.

20 Q. I'll let others comment on the track
21 record. I am not capable of doing it.

22 A. The way I think of it is that this
23 company has managed to respond to uncertainties at
24 times greater than the uncertainties we face today. I
25 think every generation thinks that the uncertainties

1 they face are the largest and unprecedented and the
2 world is more uncertain than it ever was; I don't
3 believe that one bit. I think the world was very
4 uncertain in the 30s and in the 40s and in the 50s. I
5 think Hydro responded probably with less options at
6 that time than it has today.

7 Q. Okay.

8 A. The 40s and 50s, they didn't have as
9 many options as we have today and they managed to
10 respond and provide the service. That gives comfort, I
11 think, that the years ahead are going to be managed
12 well and the service will be provided.

13 Q. Now, I have another concern in that
14 it would seem to me that planning to an upper load
15 growth, as done previously, was maybe a little, I don't
16 know whether the word easier to manage or accommodate
17 or somebody like environmentalists and government
18 legislators because, again, at the risk of
19 oversimplifying, everybody assumed, rightly, wrongly,
20 Hydro was always asking for the maximum.

21 So if you were a legislator, you would
22 listen to the concerns about the opponents of Hydro,
23 you would listen to Hydro saying we want this; the
24 other people saying, they don't need anything. So we
25 would sort of steer a middle course.

1 Everybody would be not completely happy
2 but not completely unhappy. I'm not saying the system
3 was perfect, but it seemed to be part of the 80-year
4 success rate that we have had.

5 Now, I have a concern that possibly we
6 have changed to planning around the median. We just
7 don't have this, I don't know whether the word
8 adversarial process is the right word to describe it,
9 but we don't have a benchmark anymore for us in the
10 public to be able to evaluate how things are going.

11 Is there something there that you can
12 give us a guidance as to just how the rules of the game
13 are going to change for us as to be able to measure you
14 and to be able to say, well, yes, they have performed.

15 MR. SNELSON: A. Well, clearly, there
16 are many ways in which we are accountable to our
17 customers and to the public as to our performance.
18 There are accountabilities through the reporting
19 relationships between Ontario Hydro and the government
20 and the legislature. There is the Ontario Energy Board
21 process, and there is a great deal of information that
22 Ontario Hydro makes available.

23 I think the real fundamentals as to our
24 performance are, do we succeed in meeting our main
25 criteria. And there are many of those criteria. We

1 talked about the criteria that we apply in planning.
2 And, for instance, if we were not supplying reliable
3 electricity to our customers, our customers would very
4 soon know about it and they would be telling us about
5 it. We would know about it ahead of time but they
6 would not be quiet about it.

7 If rates are going up higher than they
8 should, then our customers tell us about it. If our
9 environmental performance is not satisfactory, then
10 that is a matter of public debate and concern as to
11 what we should do to respond to that.

12 So I think there are many ways, and those
13 are examples rather than exhaustive, but there are many
14 ways in which the public and our customers are aware of
15 whether we are doing our job or not.

16 Q. One last question. To follow up on
17 Mr. Shepherd's idea of a radical planning committee,
18 and I believe maybe that was his choice of words,
19 although maybe I wouldn't go so far as to say a radical
20 planning concept, I may have asked this in another
21 fashion.

22 Does Hydro, has Hydro instituted any
23 plan, program, or advisory body either internally or
24 externally to assist in the implementing, monitoring,
25 reviewing the whole process of change to planning

1 around the median? And I guess the comment is, it
2 seems to me to be somewhat hard to teach an old super
3 tanker new tricks.

4 Are you changing your system, changing
5 the way you do things but using the same old processes
6 and people or is there anything that you are doing in
7 order to be able to help individual groups within Hydro
8 say, okay, here is the way we are looking at things
9 now. Here is what it means to, I don't know, whatever
10 organizations or divisions who may not been able to
11 completely and fully appreciate the change in planning
12 philosophy?

13 I would presume, for example, now let me
14 make a suggestion. The members on this panel here,
15 after you are through here today or tomorrow, whenever
16 you are through, instead of going back to your regular
17 jobs, well, all right, we are going to go, these six
18 people are going to be a committee. We have heard the
19 comments and suggestions of people. Now we are going
20 to go to the engineering division or the truck driving
21 division or whatever it is that is appropriate to say,
22 all right, we have changed our planning philosophy and
23 approach. Here is what it might mean to you. We will
24 help you to set up a system, adapt, and adjust to it.

25 Has there been any of that sort of thing,

1 or would that suggestion be of any merit at all?

2 A. As the role of Ontario Hydro and the
3 emphasis of its options and so on changes, then its
4 organization adjusts to meet the adjusting role. And
5 there are often communications of the sort that you
6 described.

7 But there are also major shifts in the
8 organization that take place to be able to gear up
9 effectively to perform new roles. And, for instance,
10 over the last few years, I don't key this to change in
11 planning around the upper to planning to the median.
12 But I think it is part of the evolution of Ontario
13 Hydro into a greater emphasis on demand management, and
14 non-utility generation, a lesser emphasis on building
15 major supply alternatives.

16 So you have seen a very large growth in
17 the energy service part of the organization, the energy
18 management branch to implement the demand management
19 program. The non-utility generation division was set
20 up some years ago, a few years ago, to get us into that
21 part of the business.

22 The engineering side of the organization
23 that has been focussed on building new generating
24 plants has gone through a major reorganization to
25 enable it to focus much more on the rehabilitation and

1 life extension of existing generating plants. There
2 has been a major restructuring in that area. So there
3 are changes taking place in Hydro all the time to
4 respond to and implement the changes in the planning
5 direction of the corporation.

6 MR. THOMPSON: I am pleased to hear that.
7 Those are my questions, Mr. Chairman. Thank you very
8 much, panel.

9 THE CHAIRMAN: Thank you very much,
10 counsel.

11 MR. MATTSON: Good afternoon, Mr.
12 Chairman. Mr. Chairman, I believe for purposes of
13 cross-examination we provided members of the panel and
14 yourself with a package of material we will be
15 referring to during the course of the examination. And
16 if I could have an exhibit number for that.

17 THE REGISTRAR: Number 711.

18 ---EXHIBIT NO. 711: Package of materials to be used in
19 Energy Probe's cross-examination of Panel
10.

20 THE CHAIRMAN: That is a lucky number.

21 MR. MATTSON: As usual, Mr. Chairman,
22 that exhibit is numbered in the top right-hand corner
23 with black pencil. And when I refer to the exhibit, I
24 will refer to that page number.

25 THE CHAIRMAN: Thank you.

1 CROSS-EXAMINATION BY MR. MATTSON:

2 Q. Now, many of the questions that form
3 part of the issues we are interested in have been
4 asked, so I'm going to attempt to lead you through the
5 questions to avoid duplication as much as possible. I
6 will begin the cross-examination with issues on the
7 planning process. And I will direct the questions, to
8 begin with, Mr. Snelson, at you.

9 Now, Mr. Snelson, concerning, first of
10 all, the initial Demand/Supply Plan element, which is
11 the basic load forecast, you indicated that since the
12 initial strategy was developed in Panel 1 evidence was
13 led that two assumptions have now lowered that
14 forecast, is that correct?

15 MR. SHALABY: A. That is correct.

16 Q. Thank you, Mr. Shalaby. And is it
17 fair to say, Mr. Shalaby, well, first of all, those two
18 assumptions are a higher projection of electricity
19 rates and a lower projection of electricity demand; is
20 that correct?

21 A. The first one is correct. The second
22 one is a lower projection of economic activity in
23 Ontario.

24 Q. Sorry, yes, thank you. Mr. Shalaby,
25 is it fair to say that the major factors driving up

1 Ontario Hydro's electricity costs are the poor
2 performance of the existing system?

3 DR. LONG: A. Could you be a little more
4 specific in terms of time frame?

5 Q. Well, since 1989 for the purposes of
6 this question.

7 A. Poor performance of the existing
8 system. I don't think I can agree to that, but I don't
9 have the details with me.

10 Q. Well, what would you characterize as
11 being the major factors of driving up the costs since
12 1989, or the electricity costs?

13 A. Well, I think as I have indicated in
14 my testimony earlier and it is certainly true for '93
15 that the in-service of Darlington, not any problems
16 associated with Darlington but that the in-service of
17 Darlington has been a contributing factor over a number
18 of years, especially '93.

19 Q. All right. And that is one. Can you
20 think of any others?

21 A. In real terms, lower inflation has
22 been one. I think you mentioned problems with our
23 existing nuclear system, poorer nuclear performance
24 than originally expected certainly has been another.
25 There have been other things like pension costs.

1 But a pretty significant one over the
2 last few years has been a drop in demand associated
3 with the recession, and that has necessitated higher
4 rates. In total, there have been a number of reasons,
5 poorer nuclear performance being among them.

6 Q. And the lower demand has caused the
7 share of fixed costs to increase; correct?

8 [12:20 p.m.]

9 A. The share of fixed costs. The fixed
10 costs have to be spread over fewer kilowatts and
11 kilowatthours, certainly, yes.

12 Q. Yes. Thank you.

13 Now, if you could turn to page 1 of the
14 overheads, Exhibit 682, what I have is your priority
15 strategic directions. And from the evidence in chief
16 it was indicated at the start of the planning process
17 after defining the basic load forecast, one of the
18 first things that Ontario Hydro tried to do was
19 determine the capability of the existing system;
20 correct.

21 MR. SNELSON: A. Yes.

22 Q. Mr. Snelson, the first priority
23 strategic direction that I see up there is to maintain
24 and improve the existing and committed facilities;
25 correct?

1 A. Yes.

2 Q. Did Hydro consider transforming the
3 existing system at all at this stage?

4 A. Well, the strategic direction talks
5 about improving the existing and committed facilities.
6 To some extent that may have some elements of
7 transforming them, I don't know what into, but there
8 are some elements of change anticipated in that.

9 Q. Was there a consideration of
10 adjusting or transforming the existing system into a
11 more competitive system?

12 A. There was no consideration of
13 changing the general nature of the existing system in
14 that respect.

15 Q. And there is no thought given to
16 changing the existing system at this time and to a
17 market pricing system or a marginal cost pricing
18 system; correct?

19 A. I believe that marginal cost pricing
20 was considered at a hearing of the Ontario Energy Board
21 some years ago at great length and was rejected through
22 that process that issue hasn't been reconsidered in any
23 detailed.

24 Q. So in terms of the priority strategic
25 directions, it's fair to say it wasn't considered at

1 this time?

2 A. That is correct.

3 Q. Was a more decentralized system
4 considered at this time in terms of maintaining and
5 improving the existing system and committed facilities?

6 A. A more decentralized system was
7 considered for additions to the existing system.

8 Q. Can you extrapolate on that?

9 A. I believe Mr. Dalziel in his direct
10 evidence referred to one of the planning questions that
11 was addressed in the Update as to whether there was
12 benefit in distributing the generating facilities to
13 avoid the need for major additions to the transmission
14 system.

15 Q. And that was distributed
16 geographically; correct?

17 A. That was distributed to match load.

18 Q. Thank you. Was a system that
19 considered the competitive dispatch of non-utility
20 generators considered at all in this priority strategic
21 direction?

22 A. I am not sure as to how this is
23 relevant to the existing system. We are interested in
24 non-utility generation. As we have said in our
25 evidence, most of the non-utility generation that we

1 have had available to us is not dispatchable in large
2 measure from the central control centre, but we have
3 stated that we are interested in acquiring dispatchable
4 non-utility generation.

5 Q. Mr. Snelson, I will go down then, the
6 priority strategic directions, to the third one which
7 states encourage non-utility generation. Is it fair to
8 say that that encouragement was only considered through
9 maintaining and improving the existing and committed
10 facilities, looking at it through the existing system?
11 You did not look at that encouragement through
12 alternative systems such as the ones we have gone
13 through, competitive system or marginal cost price
14 system or competitive dispatch and NUG system; is that
15 correct?

16 A. We looked upon non-utility generation
17 as being an option to add to the system as and when we
18 require additional resources.

19 Q. Right, but after, first going through
20 your first priority strategic direction which was to
21 maintain and improve the existing and committed
22 facilities; correct?

23 A. Yes. We have been at some length
24 through the degree to which this represents a priority
25 ranking, but certainly the first one in the list is

1 maintaining and improving the existing and committed
2 system.

3 Q. And all the ranking that occurs, Mr.
4 Snelson, it's fair to say, whether we are talking about
5 NUGs, other major supply options, demand management, et
6 cetera, all of those are looked at through the existing
7 system; correct?

8 A. I don't understand your through the
9 existing system.

10 We are in a particular situation, the
11 existing system exists. It is there. That is its
12 characteristic. And so that is inevitably the starting
13 point of any planning exercise.

14 That is not to say that changes cannot be
15 made to the existing system. But you have to recognize
16 that that is the starting point that you start from.

17 Q. Those changes that could be made to
18 the existing system weren't looked at for the purpose
19 of the Demand/Supply Plan option; correct? You looked
20 at maintaining and improving the existing and committed
21 facilities?

22 A. Certainly maintaining and improving
23 the existing and committed facilities is a high
24 priority in our planning strategy which was extensively
25 reviewed, and one of the purposes of that is to ensure

1 that our customers get the best value they can out of
2 the investments that they have already made.

3 Q. So do I take that to be a yes to my
4 question?

5 A. Can you repeat your question, because
6 I am not sure I understand your question.

7 Q. Mr. Snelson, I will give you an
8 example. Non-utility generation, was it ever looked at
9 through an alternative to the existing system of
10 Ontario Hydro such as a competitive system, compared
11 how a non-utility generator would function in a
12 competitive system versus a non-utility generator
13 that's supplying power through the existing system?

14 A. We have not looked at changing the
15 existing system into an competitive system in that
16 sense.

17 Q. Thank you, Mr. Snelson, all the
18 discussion with respect to planning around the median
19 or planning around the upper, et cetera, the
20 discussions with respect to planning all involve
21 acceptance of priority strategic direction No. 1, the
22 existing system, that's what we are looking at planning
23 with respect to, that's the starting point?

24 A. As I indicated, these priority
25 strategic directions are from the demand/supply

1 planning strategy, which was settled after extensive
2 public consultation, consultation with the Legislature,
3 and those are the priority strategic directions that
4 have guided our plans.

5 Q. In light of the problems that the
6 existing system has experienced in the past couple of
7 years, do you think it's wise that we look at
8 alternatives to the existing system?

9 A. We certainly see the importance of
10 correcting some of the deficiencies in the existing
11 system, and that's one of the reasons that maintaining
12 and improving the existing and committed facilities is
13 a high priority.

14 Q. Mr. Snelson, what was done in the
15 Demand/Supply Plan planning process to identify how to
16 ensure that the NUG options would provide the existing
17 Ontario Hydro system with flexibility in the future?

18 A. NUG options are usually offered to us
19 with relatively short lead times, and that inherently
20 provides us with planning flexibility.

21 Q. But my question is, in the
22 Demand/Supply Plan planning process, what did Ontario
23 Hydro do to identify how to ensure that these NUG
24 options would provide the existing Ontario Hydro system
25 with that flexibility?

1 A. I have explained that flexibility, if
2 we are talking about planning flexibility, then the
3 short lead time of non-utility generation options
4 inherently provides that flexibility.

5 Q. Mr. Snelson, did you analyze how
6 transmission policies could be restructured and
7 improved to facilitate, for example, third party access
8 to the grid?

9 A. What do you mean by third party
10 access to the grid?

11 Q. Parties other than Ontario Hydro?

12 A. And what are the parties other than
13 Ontario Hydro going to do with the grid when they have
14 access to it?

15 I am sorry, if I am appearing somewhat --
16 I am interested to know what the question is, because I
17 see this as a vague comment.

18 Q. No, I understand. If you haven't
19 looked at it I can see how it would give you problems.
20 But I would like to know if you have analyzed how
21 transmission policies could be restructured to improve
22 or to facilitate third party access, parties other than
23 Hydro to sell power to customers?

24 THE CHAIRMAN: What you are really
25 talking about is non-utility generators providing

1 direct services to the customers in Ontario; is that
2 what you mean?

3 MR. MATTSON: Mr. Chairman, that would be
4 part of it.

5 THE CHAIRMAN: Through the existing
6 transmission system.

7 MR. MATTSON: Yes, Mr. Chairman, or even
8 to Ontario Hydro for that matter. Just third party
9 access.

10 THE CHAIRMAN: They do it through Ontario
11 Hydro right now. That's what happens.

12 MR. MATTSON: I understand, Mr. Chairman.
13 And I am asking specifically what they did to analyze
14 the transmission policies to do that, to facilitate
15 that.

16 MR. SNELSON: This is to facilitate a
17 non-utility generator generating power and that Ontario
18 Hydro would wheel that power to a customer of the
19 non-utility generator who is not a customer of Ontario
20 Hydro?

21 MR. MATTSON: Q. Or to a customer of
22 Ontario Hydro through Ontario Hydro. With respect to
23 your transmission policies what have we seen in the
24 Demand/Supply Plan to support that that could take
25 place?

1 MR. SNELSON: A. Non-utility generators
2 have access to the grid and that electricity is
3 delivered to customers of Ontario Hydro, that process
4 is the normal way in which non-utility generators,
5 purchase non-utility generators work in this province.

6 Q. So it's fair then whatever potential
7 the existing system has, that's as far as your
8 investigation went. You are saying that you didn't
9 bring any further information before the Board; is that
10 correct?

11 A. We have, I believe, discussed a
12 non-utility generation wheeling policy, which, if my
13 understanding is correct, permits a non-utility
14 generator to wheel power through the Ontario Hydro
15 system to another location of his own facilities.

16 Q. So what you have now, that's as far
17 as you investigated; correct?

18 A. That's as far as our policy goes.

19 Q. Thank you.

20 Now, if you are treating gas-fired
21 non-utility generators as a reasonable alternative in
22 the planning process, which I believe is now the
23 information in the Update, would you not agree that the
24 Board should be made aware of the costs and benefits
25 that might accrue to the public if Hydro moved towards

1 a more decentralized system serviced by many suppliers
2 of power, what the costs and benefits would be and
3 where the barriers would be to implementing such a
4 system?

5 MR. B. CAMPBELL: With respect, Mr.
6 Chairman, wasn't that what Panel 5 was about? It was
7 all about non-utility generation, and any issues that
8 my friend wanted to explore with respect to specific
9 policies, he had more than adequate opportunity to do
10 so.

11 MR. MATTSON: Mr. Chairman, certainly at
12 Panel 5 I was certainly entitled to ask about the
13 existing non-utility generation and how it
14 inter-relates with the existing system. Right now I am
15 asking the planners how much further they went, further
16 than the existing system, and what they have brought to
17 this Board in terms of alternatives to the existing
18 system and alternative ways of supplying electricity.

19 THE CHAIRMAN: I think the problem with
20 the question was there was about seven questions built
21 into it, and I think if you can break them down a
22 little bit, it might be a little easier for the panel
23 to deal with them.

24 MR. MATTSON: Thank you, Mr. Chairman.

25 Q. Mr. Snelson, when I discussed earlier

1 the existing system and whether you considered it a
2 decentralized system, I believe the answer was, your
3 focus was with respect to your priorities strategic
4 directions on the existing system; correct?

5 MR. SNELSON: A. I don't believe you
6 asked me whether I considered the existing system to be
7 decentralized.

8 Q. Did Ontario Hydro consider a
9 decentralized electrical system serviced by many
10 suppliers of power?

11 A. I think that the sources of
12 generation - and Mr. Dalziel referred to this earlier
13 on - have some aspects of a centralized system and some
14 of a decentralized system. The system has small
15 sources of power that are distributed, it has 70
16 hydraulic generating stations. It also has some large
17 sources of power in large generating plants like
18 Nanticoke and Bruce.

19 Q. Mr. Snelson, in light of the fact
20 again that you are treating gas-fired non-utility
21 generators as a reasonable alternative in the planning
22 process, would you not agree that issues such as access
23 to the grid by third party producers or third party
24 wheeling would be evidence that we should have before
25 us in looking at the Demand/Supply Plan option?

1 THE CHAIRMAN: That was discussed. That
2 was discussed in Panel 5, the whole issue of wheeling
3 was discussed in Panel 5 and went into great detail.

4 MR. MATTSON: Q. Mr. Snelson, no
5 information has been brought by Ontario Hydro before
6 this Board with respect to the cost and benefits and
7 how Ontario Hydro could go about implementing third
8 party wheeling; correct?

9 MR. B. CAMPBELL: That's not correct, Mr.
10 Chairman. Panel 5 discussed Ontario Hydro's views with
11 respect to wheeling from its perspective. That was
12 done.

13 MR. MATTSON: Q. I agree. And the
14 position was that you would not -- that that
15 information was not brought before the Board as to how
16 to do it because you don't do it; correct?

17 THE CHAIRMAN: They don't do it for
18 reasons that they gave. Now if there are those who
19 think that is something they ought to do, then they can
20 bring evidence forward to demonstrate that. But I
21 think the Panel 5 witnesses went into this in great
22 detail as to why as a matter of present policy they
23 don't do that.

24 Now this is a controversial issue and
25 well recognized as such, but I think Hydro's position

1 is pretty well on the table.

2 What you want to ask these witnesses
3 about, I would think, is to what extent, if any, in the
4 planning process those matters were considered in the
5 overall Demand/Supply Plan. Those are the questions.
6 But I think it get into the details of it, Mr. Campbell
7 is right, they were dealt with in Panel 5.

8 MR. MATTSON: Thank you, Mr. Chairman.

9 Q. Mr. Snelson, are you aware of any
10 alternatives that Ontario Hydro rejected through the
11 Demand/Supply Plan planning process because the system
12 or the grid, the transmission grid was unable to
13 facilitate the purchase of that power?

14 MR. SNELSON: A. I'm not aware of any
15 technologies that were rejected for generating
16 electricity or for saving electricity, demand/supply
17 options that were rejected in the planning stage
18 because they couldn't be accepted on the grid.

19 Q. Now going beyond the technologies
20 themselves, were you aware of any alternatives that
21 were rejected because -- or an option that was rejected
22 because the system or the grid was unable to facilitate
23 the purchase of that power?

24 A. What do you mean by an option that is
25 different to a technology?

1 The way I used it, I thought I used it to
2 mean option.

3 There are no demand management options,
4 there are no non-utility generation options or major
5 supply options that I know of that were rejected at the
6 planning stage because they couldn't be accepted on the
7 grid.

8 Q. All right. If you to turn to
9 transcript 104, please.

10 MR. B. CAMPBELL: We are going to have to
11 go and get it, Mr. Chairman, if we could have a moment.
12 [12:42 p.m.]

13 MR. MATTSON: It is at page 18366, if you
14 want to take this opportunity to just read the page.

15 THE CHAIRMAN: What page?

16 MR. MATTSON: 18366, Mr. Chairman.

17 MR. B. CAMPBELL: They will take the
18 opportunity once we have got the transcript. It is not
19 in the hearing room.

20 THE CHAIRMAN: We are getting it.

21 MR. MATTSON: Just for the record, Mr.
22 Chairman, we did provide Mr. Campbell with a letter as
23 to all the transcripts we would be referring to in a
24 June 9th letter, so it is not as though I didn't remind
25 him.

1 THE CHAIRMAN: I think that one was,
2 perhaps, not included because we got the same letter
3 and we didn't have it either.

4 MR. MATTSON: That's correct. It must
5 have been a typo, Mr. Chairman.

6 MR. B. CAMPBELL: I accept the apology.

7 MR. MATTSON: Q. Now, Mr. Snelson, at
8 the bottom of the page 18366, I am asking Mr. Huggins a
9 number of questions. And I turned him to a Globe and
10 Mail article which was page 27 of the exhibit. And
11 that was Exhibit No. 460.

12 And the article referred to a plant in
13 Michigan called the CMS Corporation, that it offered to
14 sell Ontario Hydro long-term contracts to power. And
15 it indicated that they had a capacity as much as 2,000
16 megawatts.

17 On page 18369, at line 14, or line 16,
18 after asking Mr. Huggins if he was aware of it, he
19 added, I might add I am painfully aware of this deal.
20 He indicated in the next page that Mr. Eliesen would be
21 meeting the vice-president of the corporation at the
22 airport, or had met with him at the airport on Friday,
23 that Ontario Hydro would be awaiting the offer of this
24 proposal.

25 And you will note at the top of page

1 18371, Mr. Huggins stated:

2 We don't know the amounts, we don't
3 know the energy, we don't know the price,
4 we don't know the delivery path or the
5 cost of wheeling. Almost every parameter
6 of this possible purchase are unknown.

7 And he also expressed some comments that
8 he didn't expect that the proposal would be coming, as
9 he had asked for it on a number of occasions.

10 Now, is anyone on the panel aware if
11 Ontario Hydro has received the proposed contract for
12 this sale of power? And if so, if they are aware of
13 the contract and the contents.

14 MR. SNELSON: A. Exhibit 711, which is
15 your exhibit of cross-examination materials for this
16 panel.

17 Q. Yes.

18 A. Page 1 has a letter to your from our
19 lawyer, Laura Formusa, to you dated April 28th. And
20 the information in that letter is about the extent of
21 my knowledge.

22 Q. All right. If we turn to page 1 of
23 the exhibit, Mr. Snelson. I note that the letter
24 indicates that regarding the possibility of further
25 firm long-term purchases has not changed the evidence

1 of Panel 7. Since your cross-examination of Mr.
2 Huggins regarding the MCV proposal, Ontario Hydro did
3 receive a proposal from MCV for the purchase of power
4 beginning in the mid-1990s. As in the case of major
5 supply NUGs, there is no requirement for the proposed
6 power purchase from MCV. And in addition, the
7 transmission to incorporate a purchase from MCV is
8 inadequate. Therefore, Ontario Hydro is not pursuing
9 the MCV proposal further.

10 Now, is this a situation, Mr. Snelson,
11 where evidence on transmission barriers to the
12 facilitation of an alternative method of carrying out
13 the undertaking such as this would be relevant in terms
14 of weighing the costs and benefits of the alternatives
15 that you have brought before this Board?

16 A. I am not familiar with the details of
17 this proposal, though I have an understanding at about
18 the level that is in this letter. The primary reason
19 that is given in this letter is that we don't need the
20 power at that particular time, just as we don't need
21 more combined-cycle gas non-utility generation in the
22 province at that time from non-utility generators.

23 There is a transmission reason in there.
24 If we were to be pursuing the purchase, then one of the
25 questions we would have to ask for this particular

1 purchase from this particular location would be if we
2 want to proceed with this purchase, is it worth having
3 the transmission upgraded to be able to accommodate it.

4 Q. Mr. Snelson, it is fair to say that
5 you have indicated in evidence in chief that a major
6 factor in the Update is based upon the flexibility
7 offered by major supply NUGs.

8 THE CHAIRMAN: Their evidence in this
9 panel is at that the moment they are not accepting
10 proposals from major supply NUGs.

11 MR. MATTSON: Q. But, Mr. Snelson,
12 certainly a major factor in the Update for not
13 requesting approvals is the flexibility that major
14 supply NUGs offer you.

15 A. That is correct. And flexibility has
16 two components. One is that you don't need to buy it
17 if you don't need it. And if you do need it, then you
18 can buy it with a relatively short lead time.

19 Q. Now, if we are going to accept
20 Ontario Hydro's proposition that major supply NUGs do
21 offer Ontario Hydro some flexibility in the long-term
22 with respect to major supply NUGs, don't you think that
23 information on the costs and benefits of overcoming,
24 for example, transmission barriers such as this one
25 identified, it would be helpful to know as to whether

1 or not that alternative is a reasonable one that should
2 be pursued further?

3 MR. B. CAMPBELL: Well, Mr. Chairman,
4 with respect, my friend seems to have forgotten totally
5 that Panel 7 identified for the Board the major
6 improvements that Ontario Hydro felt it had to make to
7 its transmission system, the timetable for doing that,
8 and the fact that it had plants underway to do that
9 exact thing.

10 So, for my friend to keep characterizing
11 it as if no one had ever heard of this idea is, in my
12 submission, not only incorrect; it is actively
13 misleading. And I do take the position that that
14 matter was fully gone into in Panel 7. There is no
15 point in repeating it here.

16 MR. MATTSON: Mr. Chairman, I take great
17 exception to Mr. Campbell's complete reliance on the
18 evidence of the earlier panels when I am talking about
19 planning issues and what evidence went into planning
20 with respect to the Demand/Supply Plan options. It is
21 clear in Panel 7 --

22 THE CHAIRMAN: The evidence was what was
23 given in Panel 7. I think you are straying back into
24 the detailed areas of Panel 7. I think you have to
25 deal with this panel on the basis of planning issues.

1 MR. MATTSON: Q. If you turn to Exhibit
2 No. 3, chapter 14, page 7, Mr. Snelson, which is your
3 Demand/Supply Plan, the heading in the right-hand
4 column is Potential for Purchases from the U.S. And
5 the last paragraph, the next page, top of that section
6 states:

7 Accordingly, because of the
8 uncertainty in the U.S. supply/demand
9 picture and the high cost of purchases,
10 Hydro cannot at this time rely on the
11 U.S. for reliable and economic supply of
12 electricity.

13 Correct?

14 MR. SNELSON: A. That is what was said
15 in Exhibit 3. I believe Mr. Huggins may well have
16 qualified that in the light of current circumstances on
17 Panel 7.

18 Q. All right. Now, surplus capacity and
19 the lack of adequate transmission lines are not stated
20 as reasons for discarding this option at this time, was
21 that correct?

22 THE CHAIRMAN: Mr. Huggins, again, gave
23 quite extensive evidence about the various
24 possibilities for purchases out of the province and the
25 reasons why they were or were not picked up.

1 MR. MATTSON: Mr. Chairman, the reason
2 why this deal was, in fact, discarded is evidence that
3 has come to light since Mr. Huggins' evidence.

4 THE CHAIRMAN: When you say "this deal,"
5 what do you mean by "this deal"?

6 MR. MATTSON: CMS alternative supply of
7 electricity.

8 THE CHAIRMAN: I don't think we want to
9 hear any more about that particular deal, Mr. Mattson.
10 The evidence is that they are not accepting proposals
11 today for new major supplier NUGs. That is Hydro's
12 position right now, whether the transmission is there
13 or isn't there; is that correct?

14 MR. SNELSON: Yes, that is correct.

15 MR. MATTSON: Q. Mr. Snelson, if you do
16 rely on them for flexibility in your Update in the
17 long-term, at some point you will have to have the
18 transmission capability to implement these
19 alternatives, correct?

20 MR. SNELSON: A. Yes, and that was
21 addressed by Dr. Macedo on Panel 7.

22 Q. Was there any evidence brought to how
23 to address this barrier?

24 A. Which barrier?

25 Q. With respect to this proposal we have

1 discussed.

2 THE CHAIRMAN: Yes, there was. It may
3 not have been adequate in your view, but they did the
4 best they could.

5 MR. MATTSON: Q. Mr. Snelson, since the
6 planning process began for the Demand/Supply Plan back
7 in 1985, around 1985, I believe again the evidence has
8 been that rising rates lower demand and a fall in the
9 natural gas prices have had an impact on your plan,
10 correct?

11 MR. SNELSON: A. Can we deal with them
12 one at time?

13 Q. It is been gone into in the evidence,
14 though, to great extent, correct?

15 A. I am sorry. When you give me a list,
16 I remember the last one. I am not sure I remember the
17 first one, so --

18 Q. All right. Increasing rates.

19 A. Dr. Long has referred to increasing
20 rates. That has had an effect on the load forecast.

21 Q. Lower electricity demand?

22 A. That is load forecast, and I believe
23 we discussed the effect that that has had. I believe
24 since 1985 we have had both increases in the load
25 forecast because of high growth, while we were having

1 high growth in the late 1980s and we have had some
2 reduction in the load forecast since the current
3 recession was started to be factored into forecast.

4 Q. And a drop in the price of natural
5 gas?

6 A. That has had an effect upon the
7 competitive position of options.

8 Q. And is it fair, Mr. Snelson, to
9 suggest that an interest in Ontario towards a
10 competitive market for electricity has been sparked
11 since the beginning of the demand/supply options in the
12 mid-1980s?

13 A. I am not sure that is a major factor
14 in our planning.

15 Q. No, but it is fair to say that there
16 has been an interest since the planning process began.

17 A. I believe there has been interest in
18 such matters both before the planning process began and
19 during it and now.

20 Q. Would you say that rising rates,
21 lower electricity demand, and the price of natural gas
22 have accelerated that interest?

23 A. In some quarters, maybe, yes.

24 Q. Now, I have provided, at page 4, 5,
25 6, and 7 of the exhibit, some editorials from leading

1 newspapers in Ontario that were published after the
2 Demand/Supply Plan options in 1989 and identify
3 alternatives to Hydro's existing system as
4 possibilities.

5 [12:55 p.m.]

6 Have these articles made Ontario Hydro
7 reconsider if all reasonable options were investigated
8 by the Corporation in determining how to meet needs of
9 Ontario's electricity customers in the Demand/Supply
10 Plan?

11 DR. LONG: A. Are you asking whether
12 it's made us reconsider?

13 Q. Yes, Dr. Long.

14 A. No. I think Hydro's position on
15 these matters was I think clearly stated in the
16 argument around the funding panel and they haven't
17 changed.

18 Q. Page 2 of the exhibit you will note
19 an excerpt from New Directions: A Blueprint for
20 Economic Renewal and Prosperity in Ontario prepared by
21 the Ontario Progressive Conservative Caucus Leader,
22 Mike Harris. And at page 2 --

23 MR. B. CAMPBELL: Just a moment. I was a
24 little unclear on this because I noticed it had Mr.
25 Solomon's name at the bottom. I took it he was the

1 author.

2 MR. MATTSON: No. This is page 16 of the
3 New Direction.

4 MR. B. CAMPBELL: I'm sorry?

5 THE CHAIRMAN: I take it it's a quote of
6 Mr. Solomon's that's imbedded in the material.

7 MR. MATTSON: That's correct. I have
8 just provided an excerpt of page 16 of New Directions
9 and it speaks of Ontario Hydro reforms. I needn't get
10 into that at the moment.

11 MR. B. CAMPBELL: I'm sorry. I see what
12 it is, it's a quote at the bottom that's Mr. Solomon.
13 I'm sorry, my photocopy is terrible. It's obviously
14 about three layers in and I thought it was like a
15 signature, like an author of that page.

16 MR. MATTSON: No.

17 MR. B. CAMPBELL: I'm sorry. It's just
18 my photocopy is so bad I got confused on it.

19 MR. MATTSON: No, just referring to an
20 expert in the field.

21 MR. B. CAMPBELL: I notice the position
22 of the third party on this matter.

23 THE CHAIRMAN: Perhaps it's time to have
24 lunch.

25 MR. MATTSON: Yes, Mr. Chairman.

1 THE REGISTRAR: Please come to order.

2 This hearing will adjourn until 2:30.

3 ---Luncheon recess at 12:59 p.m.

4 ---On resuming at 2:30 p.m.

5 THE REGISTRAR: Please come to order.

6 This hearing is again in session. Be seated, please.

7 THE CHAIRMAN: Mr. Campbell?

8 MR. B. CAMPBELL: Mr. Chairman, Mr.

9 Shalaby advised me a moment ago that you will recall
10 that he told Mr. Hunter he would check on his answer
11 with respect to the mandation risk portion of the
12 discussion in Exhibit 452 and would let him know if
13 there was any correction or additions he needs to
14 make. I am told that he wants to say something. My
15 recommendation is, with Mr. Mattson's permission which
16 I have obtained, they be allowed to add his additional
17 comments and I will ensure that Mr. Hunter gets those
18 pages of the transcript directed to him.

19 THE CHAIRMAN: Thank you.

20 MR. SHALABY: This is regarding a
21 discussion that started on page 27992 on June 8th, and
22 it was explained why the mandation risk in Hydro's
23 Exhibit 452A is 900 megawatts in the year 2000, why is
24 that different from the standards, plus the mandation
25 in fuel switching which added up to 1,440 megawatts.

1 And the explanation I offered at the time is that I
2 guess perhaps the existing standards will take care of
3 the difference.

4 I am now advised that the reason the
5 analysts have two different estimates is that they
6 consider Hydro's programs capable of making up some of
7 the shortfall for mandation.

8 So if there wasn't mandation, that would
9 have taken care of 1,440. Hydro's programs would make
10 up some of that difference and the deficit will only be
11 900, not the full 1,440.

12 THE CHAIRMAN: .9 then is measuring the
13 mandation risk, in doing that they are offsetting the
14 program results?

15 MR. SHALABY: Hydro's programs will
16 offset some of the shortfall that would occur if
17 mandation does not take place.

18 THE CHAIRMAN: So the figures in the
19 table that were in the fuel switching and the other
20 standards, I forget the table that you were referring
21 to.

22 MR. SHALABY: Table C-3, I think it was.

23 THE CHAIRMAN: Case C.

24 MR. SHALABY: Yes.

25 THE CHAIRMAN: Those figures then stand.

1 MR. SHALABY: Those stand.

2 I am only explaining why is that we think
3 if standards and mandation doesn't come about, why is
4 that we think the risk is not 1,440 but 900. And we
5 think it's not 1,440 completely because our programs
6 will make progress in these areas even though mandation
7 does not exist.

8 THE CHAIRMAN: Thank you.

9 MR. B. CAMPBELL: Thank you, Mr.
10 Chairman.

11 THE CHAIRMAN: Mr. Mattson?

12 MR. MATTSON: Thank you, Mr. Chairman.

13 Q. We finished off just before lunch at
14 page 3 of the exhibit, 711. And if you would look five
15 paragraphs done that page, you will note that this New
16 Directions document of the Conservative Parties
17 indicates that:

18 Consumers and the environment would
19 benefit if Ontario privatized more
20 generating stations and opened up the
21 electricity sector to competition.
22 Mr. Snelson, I take it that you wouldn't
23 agree with that statement?

24 MR. SNELSON: A. Well, I don't know what
25 is intended by the statement. This is a political

1 document from an opposition party in the Ontario
2 Legislature, as I understand it, I haven't seen the
3 document before. And whether that is included or
4 exists in addition to what is described in the next
5 sentence, which is Hydro should also expand the
6 opportunities of cogeneration and continue to purchase
7 power at the same price at which the utility produces
8 it, that last statement -- as I say, this is first time
9 I have seen it, but on the face of it, it looks to be a
10 statement that we should continue to buy power at
11 avoided cost, and I don't know whether that's in
12 addition to or different to what is intended in the
13 first sentence.

14 Q. But would you agree that consumers
15 and the environment would benefit if Hydro privatized
16 more generating stations and opened up the electricity
17 sector to competition?

18 A. I don't see on the face of it what
19 ownership has to do with the effects on consumers and
20 the environment.

21 Q. And those weren't options that were
22 evaluated in the Demand/Supply Plan options; correct?

23 A. We did not evaluate the option of
24 privatizing Ontario Hydro.

25 Q. Has Ontario Hydro taken notice of

1 changes in the electricity systems in other Canadian
2 jurisdictions such as Nova Scotia, British Columbia or
3 Alberta moving towards competitive systems?

4 A. I think we are aware of some of the
5 things that are happening there, I am not sure just how
6 much we are aware of all the details.

7 Q. Do you believe that there is
8 information or other alternatives being identified in
9 those provinces that we should hear about at this
10 hearing before deciding upon your Demand/Supply Plan
11 option?

12 A. I believe we presented the
13 information on the options that alternatives for both
14 the options were are proposing and the alternatives to
15 what we are proposing.

16 Q. Mr. Snelson, what impact did the
17 decision of New York State to cancel the James Bay 2
18 contract have on your plans, if any, to buy power from
19 James Bay 2? Was there any impact with respect to your
20 plan that that had --

21 THE CHAIRMAN: There are no plans, as far
22 as I know, to buy power to James Bay 2.

23 MR. SNELSON: Ontario Hydro has no plans
24 to buy power from James Bay 2.

25 MR. MATTSON: Q. Was there anything that

1 can be learned from New York's decision, though, to
2 cancel their contract to buy power from James Bay 2?

3 MR. SNELSON: A. I don't know of any
4 specific lessons that we would learn from that, it's
5 all part of the utility environment in North America.

6 Q. Thank you. Moving to another area
7 briefly. Mr. Snelson, I would like to deal with --
8 just ask the question with respect to the role of major
9 supply NUGs in the Update.

10 Is it fair to say that recently Ontario
11 Hydro changed some of the rules regarding independent
12 power producers in this province where independent
13 power found themselves in a position where they had
14 spend a substantial sum of money on efforts to find
15 Ontario Hydro -- or towards supplying independent power
16 to Ontario Hydro and then to find that their efforts
17 were.

18 THE CHAIRMAN: Mr. Mattson, that is a
19 very argumentative question. Can't you put it in a
20 little simpler fashion for Mr. Snelson to try and
21 answer it?

22 MR. MATTSON: Yes, Mr. Chairman.

23 THE CHAIRMAN: They have changed their
24 policy with respect to accepting proposals for major
25 supply NUGs and they have explained why that was. You

1 can certainly follow up and ask them about that.

2 MR. MATTSON: Thank you Mr. Chairman.

3 Q. Mr. Snelson, could these companies,
4 now that these proposals have been put on hold, could
5 they become reluctant to invest any more into the
6 electricity sector if they are not given guarantees
7 that their investment is assured?

8 MR. SNELSON: A. Well, in most cases, in
9 fact in all cases none of these proposals that have
10 been put on hold have got signed contracts.

11 So, I am not sure what investment it is
12 you are referring to. They haven't built a generating
13 plant.

14 Q. But you would agree that many of the
15 independent power producers spend substantial amounts
16 of money up front because of the belief that they felt
17 that they would have signed contracts with Ontario
18 Hydro for the supply of electricity; correct?

19 A. They certainly in many cases will
20 have had to spend some money to prepare their
21 proposals. I think they would always realize that
22 there was some chances that they might not be selected.

23 THE CHAIRMAN: Let me ask you this, Mr.
24 Snelson. The policy of not now accepting proposals for
25 major supply NUGs, what effect, if any, does that have

1 in dampening the prospects of future proposals in
2 future years, should that policy change?

3 MR. SNELSON: I think it is important
4 that we be seen to have dealt with these people fairly
5 people fairly and openly. And the projects that had
6 been given status to negotiate, which were 13 projects,
7 they have been given a different treatment and
8 preferential treatment to projects which have never
9 been given any encouragement as a likely project to
10 proceed. And they were put on hold in December and
11 they are being renegotiated, but they have not just
12 been told to go away. And it may very well be that
13 quite a large number of those projects in one form or
14 another will proceed.

15 MR. MATTSON: Q. Have you considered,
16 Mr. Snelson, whether the private investment capital
17 that you are counting on in the Update, if the need be,
18 will be available in the future?

19 MR. SNELSON: A. We have considered the
20 question as to whether it is likely there will still be
21 proposals in the future, and our view is that, yes,
22 there will be.

23 Q. I would like to move to a new area.
24 If you could turn to page 8 of the exhibit. This is an
25 interrogatory from Municipal Electric Association, ID

1 No. 2.9.7.

2 THE REGISTRAR: That is.42.

3 ---EXHIBIT NO. 683.42: Interrogatory No. 2.9.7.

4 MR. MATTSON: Q. Now, this interrogatory
5 was answered approximately one year prior to the
6 release of the Update on January 14th, 1991. You will
7 note the question asks:

8 Demand/Supply Plan report indicates
9 that units are to be retired at the end
10 of their 40-year service life. Please
11 provide the supporting information or the
12 studies related to the decision to retire
13 units as opposed to carrying out life
14 extension efforts.

15 And the third paragraph in the response:

16 Hydro is 12 to 24 years away from the
17 planned retirement date of the units that
18 are expected to retire during the 25 year
19 period of the Demand/Supply Plan. The
20 actual decisions to retire these units
21 will require detailed consideration of a
22 number of factors including technical,
23 economic, safety and environmental
24 regulations. A detailed review of life
25 extension versus retirement will take

1 place at the end of the service life, as
2 the service life nears.

3 Now, what has happened since then, Mr.
4 Snelson, to cause Hydro to change its position on this
5 issue?

6 MR. B. CAMPBELL: Mr. Chairman, wasn't
7 that gone into in exhaustive detail in Panel 8? Life
8 extension was the subject of an enormous amount of
9 cross-examination in Panel 8, this very question.

10 MR. MATTSON: I understand, but from a
11 planning perspective, with respect to planning in the
12 period that they are talking of here, and the
13 uncertainty in planning over a 12 to 24-year period,
14 Mr. Chairman, just from that perspective alone, why
15 there would be any more certainty now with respect to
16 the question than there was when this interrogatory was
17 answered.

18 THE CHAIRMAN: The interrogatory says
19 that they are not going to do it for a while, and as
20 Panel 8 explained they are now considering it. They
21 haven't made any final decisions yet, but they have
22 some plans.

23 As Mr. Campbell says, that was all gone
24 into in Panel 8.

25 Now, if you want to ask him what the

1 effect of that latest decision has on their planning,
2 that is a question you can ask them, or ask them about.
3 But I don't think you can question the decision itself.

4 MR. MATTSON: Q. Just with respect to
5 the certainty involved then of predicting over the
6 course of the 12 to 24-year period, the reason in the
7 interrogatory, I take it, was that this decision until
8 closer to the date of retirement shouldn't be made
9 because it's too difficult to predict with any
10 certainty the costs involved, the probability of
11 success or even the need of it; is that fair, Mr.
12 Shalaby?

13 MR. SHALABY: A. That was the view taken
14 in 1989 Demand/Supply Plan

15 Q. And what is it that's changed that
16 makes Hydro now feel more confident in its forecasting
17 or its estimate of the service life to rely on the
18 extension for planning purposes?

19 A. I think that is exactly the issue
20 that Panel 8 addressed at length. I don't have much to
21 add to the evidence given by Panel 8.

22 Q. We have reviewed Panel 8 evidence,
23 and I won't get into it, but if I take it that that
24 answer -- if we didn't have answer to that specifically
25 questions, I take it there is nothing more to add then.

1 A. I assure you that it is answered
2 several times during Panel 8 discussion, and in direct
3 evidence as well associated with Panel 8, and in
4 interrogatories.

5 Q. I am not sure but I believe these
6 questions now are directed to Ms. Howes or Dr.
7 Tennyson. And I believe it's the evidence at this
8 hearing that Hydro acknowledge the importance of
9 addressing past grievances; correct?

10 THE CHAIRMAN: What sort of past
11 grievances are you referring to?

12 MR. MATTSON: Q. Specifically with
13 respect to hydraulic issues.

14 DR. TENNYSON: A. I am not quite sure
15 what you are referring to. If it was with respect to
16 our relationships with First Nations, then any such
17 discussion of grievances would have occurred on Panel 6
18 and on Panel 7, if that's what you are referring to.

19 [2:52 p.m.]

20 Q. Yes, that is what I am referring to.
21 And I have the evidence on that. If Hydro doesn't get
22 the approvals requested from this Board, Dr. Tennyson,
23 will it remain to resolving those past grievances?
24 Will it remain committed to that?

25 A. We have entered into relationships

1 with various First Nations and treaty organizations,
2 and they are to do with specific projects that we are
3 proceeding with at the present time. In terms of the
4 branch in the Corporation is the Aboriginal Northern
5 Affairs branch, and they are also actively negotiating
6 right now processes with individual First Nations to
7 deal with past grievances.

8 Q. And, Dr. Tennyson, I believe it is
9 also in evidence that communities have asked Ontario
10 Hydro to resolve grievances from Hydro's past
11 activities before proceeding with the developments of
12 the plan. And given Hydro's plans, is that possible or
13 is that something that can't be done?

14 A. Once again, you would have to be more
15 specific. Certainly, in terms of my work, that is not
16 the case. We are dealing in parallel with ongoing
17 studies as well as trying to deal with past grievances
18 and other outstanding issues. You can appreciate that
19 not all issues are project-specific.

20 THE CHAIRMAN: On Panel 6, Mr. Mattson,
21 this whole business of the timing of resolving past
22 grievances and its relationship to projects was
23 discussed, and I think it was Ms. Quinn, it is my
24 recollection, went into this whole issue in
25 considerable length. And I'm sure you would be able to

1 find it in the Panel 6 evidence.

2 MR. MATTSON: Yes, Mr. Chairman. I have
3 the transcript references where the evidence I am
4 putting to this panel are. But I am not asking
5 questions -- I take it the evidence has already come in
6 at those panels. I am asking with respect to the plan
7 if, in fact, Hydro was asked to resolve those
8 grievances first before going ahead with the plan, I
9 was wondering if that is possible given the
10 Demand/Supply Plan options or are there constraints in
11 the planning that don't make that possible?

12 THE CHAIRMAN: I think Ms. Quinn was
13 asked that question and answered it and gave Hydro's
14 position with respect to that. I don't know what more
15 you can add to that.

16 And again I say, perhaps it is
17 unnecessary, you don't necessarily have to agree with
18 what Ms. Quinn said. But what she said represented
19 Hydro's position on it.

20 MR. MATTSON: Q. I would like to ask a
21 number of questions with respect to your hydraulic cost
22 assessments that came out of the Panel 6 evidence; page
23 21 of the exhibit. You see an excerpt from the
24 original hydraulic plan, Mr. Snelson, Cost Data and
25 Evaluations.

1 MR. SNELSON: A. Yes.

2 Q. And if you look under the
3 cost/benefit ratio, do you see that column? Second
4 last column.

5 A. Yes.

6 Q. For 8 of the 12 projects in the
7 original hydraulic plan, Ontario Hydro estimated cost
8 benefit ratios of greater than one, indicating that
9 they are not cost-effective, correct?

10 A. Yes.

11 Q. If you turn to page 22 of the
12 exhibit, figure 3, Cost and Data Evaluations, Update of
13 Figure 10 and the Hydraulic Plan Report. And you will
14 note down in the bottom left-hand corner dated
15 November, 1991. Do you see that?

16 A. Yes.

17 Q. You will note that the cost/benefit
18 ratio column again, as a result of, and I believe it
19 was the 10 per cent preference premium was added and
20 the avoided cost were changed, that as a result 6 of 12
21 in Hydro's estimation came below the ratio of 1 and 6
22 above, correct?

23 A. Yes.

24 Q. Now, the avoided costs Hydro used to
25 calculate the ratios in November 1991 were higher than

1 the avoided costs Hydro is now using, correct?

2 MR. SHALABY: A. I think I gave evidence
3 to that in direct testimony. I refer you to page 75
4 and 76 of our Exhibit 682. In particular, page 76 has
5 further update to your page 22. So that, in effect, is
6 the third snapshot. What you have shown us is here is
7 the original hydraulic plan and you show us information
8 from Exhibit 359 which was available at the time of
9 Panel 6 evidence.

10 Q. Yes.

11 A. Our page 76 is the most recent
12 cost/benefit ratio to the hydraulic programs. And
13 those ratios show that now four projects have a
14 cost/benefit ratio above one and eight have
15 cost/benefit ratio below one.

16 Q. Yes, I see that. And can you
17 indicate why the ratios improved?

18 A. The ratios improved because the
19 long-term avoided costs are higher. I explained that
20 in direct evidence. And hydraulic projects use a
21 90-year evaluation period and they are heavily
22 influenced by the tail end of the avoided cost
23 estimates. And the higher those values, the more
24 favourable hydraulic projects look.

25 Q. Mr. Shalaby, how would NUG

1 availability be influenced by using the enhanced
2 avoided costs used in the update of the hydraulic cost
3 benefit assessments?

4 A. The NUG availability?

5 Q. Yes.

6 A. Do you mean by that the potential for
7 NUGs?

8 Q. Yes.

9 A. Long-term NUG projects that would be
10 evaluated over a long period of time would improve in
11 their economics.

12 Q. If you turn to page 24 of the
13 exhibit, under the levelized avoided cost column. Do
14 you have that, Mr. Shalaby?

15 A. Yes.

16 Q. Is it fair to say that these
17 levelized avoided costs might be attractive to the
18 private sector?

19 A. I think levelized cost is not
20 something that would be either attractive or
21 unattractive to a developer. They are simply the costs
22 of producing electricity spread over the life of the
23 facility. So it really depends on what they are
24 getting for their electricity. This is what it will
25 cost to produce it. If they get paid more than that,

1 then it is an attractive proposition.

2 Q. Is it fair, Mr. Shalaby, to say that
3 if Hydro put out a request for proposals for NUGs
4 corresponding to the power to be met by the hydraulic
5 plan, that there would be bids below Hydro's avoided
6 costs?

7 A. The bids also have to meet the same
8 conditions that the operation of these hydraulic plans
9 would meet, particularly the idea of being dispatched.
10 Some of these facilities, as you see on this table and
11 elsewhere in the hydraulic plan, are low in capacity
12 factor. Some would be 10, 15 per cent capacity factor.

13 If there is a non-utility generation that
14 is prepared to operate at 10 or 15 per cent capacity
15 factor and be under the full dispatch of our control
16 centre, then these payments are certainly available to
17 them, or something close to that.

18 Q. Would Ontario Hydro commit itself to
19 such a request for approvals, prior to approvals?
20 Sorry.

21 A. Commit itself to what in specific?

22 Q. Request for proposals prior to
23 approval.

24 A. Approval of what?

25 Q. Okay. I'll ask that again. Would

1 Ontario Hydro commit itself to such a request for
2 proposals prior to commitment to the project, the
3 hydraulic projects.

4 A. I cannot give that kind of
5 commitment, no. We have had requests for proposals
6 from non-utility generation over the last several
7 years, and we have had a large number of projects
8 submitted to us.

9 Q. If you are going to commit to the
10 hydraulic plan, wouldn't it be wise to first see if the
11 private sector could do it cheaper first?

12 A. Many of those sites are Ontario Hydro
13 owned and operating sites that are being extended.
14 Mattagami, for example, falls under that category.
15 Niagara falls under that category. And the private
16 sector participates in the redevelopment and
17 construction of these projects.

18 Q. Is it possible that they could buy
19 the sites from Ontario Hydro and Ontario Hydro would be
20 better off? Is that possible, Mr. Shalaby?

21 A. That is not a current policy of
22 Ontario Hydro.

23 Q. But is it possible that Ontario Hydro
24 could be better off?

25 A. I think the perspective we look at is

1 not whether Ontario Hydro would be better off. We look
2 at the perspective of our customers, whether our
3 customers are going to be better off.

4 MR. SNELSON: A. The issue of selling
5 existing Ontario Hydro hydraulic generating stations
6 was discussed on Panel 6 as well as the options that is
7 considered under the SHARP program.

8 Q. I understand, Mr. Snelson. We are
9 discussing proposed sites, not existing ones.

10 A. I think your question to Mr. Shalaby
11 was with regard to existing sites.

12 Q. Sites Ontario Hydro owns where there
13 may not be facilities at the moment, correct?

14 A. The sites that Mr. Shalaby referred
15 to is the Mattagami and Niagara are sites where Ontario
16 Hydro owns and operates existing hydraulic generating
17 centres.

18 Q. And Mattagami is a redevelopment,
19 correct, Mr. Shalaby?

20 MR. SHALABY: A. Redevelopment for
21 hydraulic sites, yes.

22 Q. And Niagara is a new site, correct?

23 A. Niagara is a redevelopment of the
24 site, as well, or an extension to the site.

25 Q. Thank you. And it is a new facility

1 at Niagara, as well, correct?

2 A. It is an addition to an existing
3 complex, yes.

4 Q. Now, Mr. Shalaby, if you would look
5 at page 24 down the column at Ragged Chute,
6 (redevelopment), no, Renison, (new). We will go to a
7 new site.

8 A. Yes, I see it.

9 Q. It is not owned, correct?

10 A. Not to my knowledge, but I cannot be
11 certain of that.

12 Q. Now, could Ontario Hydro, I believe
13 the site is owned by Ontario Hydro, correct, but there
14 is no facility.

15 MR. SNELSON: A. I don't think any of us
16 here are familiar with the details of all the proposed
17 and possible Hydro electric sites. The people who are
18 most familiar with that were on Panel 6.

19 THE CHAIRMAN: Well, let's assume for the
20 purpose of the question, if Mr. Mattson wants to do it
21 that way, that Ontario Hydro is the owner of the site.

22 Is that the way you want it, Mr. Mattson?

23 [3:05 p.m.]

24 MR. MATTSON: Yes, Mr. Chairman, I was
25 going to suggest that.

1 Q. If we suggest that Ontario Hydro owns
2 the site, would it be Ontario Hydro's interest to sell
3 the site and buy the power and Ontario Hydro would be
4 able to make a profit; correct?

5 MR. SHALABY: A. Not necessarily, no.

6 Q. Could make a profit?

7 DR. LONG: A. Ontario Hydro does not
8 make a profit. I am not sure what you mean by that
9 term.

10 Q. This would be cost-effective to
11 Ontario Hydro?

12 MR. SHALABY: A. To have it developed by
13 non-utility industry, is that what you mean?

14 Q. Yes, to sell the site and to buy the
15 power.

16 MR. SNELSON: A. I think you have to
17 look into some of the specific issues. For instance,
18 any generating plant that is on a river which currently
19 has existing generating facilities, then it will be
20 important that whoever owns and operates the new
21 facility, that it be done so, that it be operated in
22 coordination with the existing facilities on the river
23 so as to get the best possible use out of that river.

24 I think we have an example that will
25 perhaps give us some guidance as to just how successful

1 we are in the regard of having large hydroelectric
2 developments developed by private generators on rivers
3 that currently have existing facilities with water
4 control by Ontario Hydro. In the experiences with
5 respect to the Grand Rapids site which is a site which
6 has been released to the private sector by the Ministry
7 of Natural Resources, it is downstream of the Mattagami
8 plants, and we will be very interested to see whether
9 it is possible to come to an arrangement with that
10 developer for developing a plant and operating it in
11 such a way that it will coordinate with the existing
12 facilities and the proposed extensions on that river.

13 Q. Thank you, Mr. Snelson.

14 If you turn to page 25 of the Exhibit. I
15 am looking at Appendix 1 to that, that's the cover
16 letter, and I am looking at Appendix 1 which is page 26
17 of the exhibit, entitled: Levelized Unit Energy Cost,
18 the LUEC Comparison. A couple of quick points of
19 clarification. It shows a recent Ontario Hydro
20 estimate of LUEC for the Manitoba Purchase and it is
21 estimated incremental LUEC is 4.5 cents a kilowatthour
22 is still Ontario Hydro's estimate, Mr. Shalaby?

23 A. We gave the most recent estimates in
24 the transcript undertaking, which is Exhibit 442.7, and
25 I believe that if you go to Appendix C of that

1 transcript undertaking, then the latest estimate of the
2 total levelized unit energy cost in 1991 cents per
3 kilowatthour for the Manitoba Purchase is 4.7 cents a
4 kilowatthour, assuming the supplemental energy is
5 taken.

6 Q. Is that system expansion or direct
7 and allocated?

8 A. That will be calculated on the basis
9 of additional costs which is the system expansion
10 basis.

11 Q. Thank you. And would the direct and
12 allocated costs be higher or lower, Mr. Snelson?

13 A. We don't normally separately estimate
14 direct and allocated costs for our projects. I don't
15 know of any substantial use of common facilities that
16 might cause a substantial difference in this case.

17 Q. Mr. Snelson or Mr. Shalaby, with
18 respect to Darlington GS and the 4.5 cents per
19 kilowatthour, what was the assumed capacity factor?

20 MR. SHALABY: A. We don't have specific
21 knowledge of what was used in this particular document,
22 but one can assume that it's the current projection at
23 the time of the lifetime capacity factor of the
24 station, somewhere in the mid-70s or high 70s perhaps,
25 or perhaps even 80 per cent.

1 Q. At the time?

2 A. That was a typical assumption used in
3 estimating lifetime capacity familiar for nuclear at
4 time, yes.

5 Q. But the 80 per cent capacity factor
6 is no longer being used with respect to Darlington;
7 correct?

8 A. There has been evidence in Panel 9 of
9 the exact expectations for Darlington, yes.

10 Q. Now, just back to Manitoba for a
11 moment, page 27 of the exhibit. It's an interrogatory
12 from Energy Probe, ID no 10.2.27.

13 THE REGISTRAR: That's .43.

14 ---EXHIBIT NO. 683.43: Interrogatory No. 10.2.27.

15 MR. MATTSON: Thank you.

16 Q. The question is:

17 Please provide a comprehensive
18 assessment of the value of a NUG in the
19 West system with and without both of the
20 Manitoba Purchase and the Little Jackfish
21 development.

22 And the interrogatory indicates that
23 Hydro has not evaluated the avoided costs for NUG on
24 the West system in the absence of the Manitoba Purchase
25 and Little Jackfish.

1 Is that answer still correct, Mr.
2 Snelson?

3 MR. SNELSON: A. Yes, I believe so. The
4 difference between avoided cost for NUGs in different
5 areas of the province would require identifying the
6 transmission effects, and I believe that we have given
7 evidence that we haven't, at this point in time, tried
8 to allocate the transmission costs differently to
9 different NUGs in different areas of the province.

10 Q. Thank you. Now, I don't believe you
11 have to turn to the transcript, but it's transcript
12 122, page 21440, the issue was raised at that panel. I
13 will give you time to look it up, if you like.

14 MR. B. CAMPBELL: We are going to get a
15 copy of the transcript. I don't believe we have it out
16 here.

17 MR. MATTSON: Q. You may not need it.
18 The issue was raised at Panel 9 that the generator
19 shaft cracking at Darlington could have happened at a
20 fossil station, and Mr. Daly indicated at that place in
21 evidence that because generators at nuclear plants were
22 the same at fossil and nuclear plants, the Darlington
23 experience with cracking could occur in fossil units.
24 Is that fair?

25 MR. SNELSON: A. I believe he said that

1 and I have no reason to doubt him.

2 Q. All right. Now as a planner the
3 incident of a cracked generator shaft at a nuclear
4 plant is much more financially severe than at a fossil
5 plant; correct?

6 A. To some degree.

7 Q. Mr. Snelson, this is because of the
8 higher capital cost of nuclear plants, with the base
9 load function of the nuclear plants that when a problem
10 with equipment like a generator occurs, the financial
11 implications are much more severe for Hydro?

12 A. No. It's because of the lower fuel
13 cost of the nuclear plant and you fail to get the fuel
14 savings during the period when the plant is
15 out-of-service for any reason.

16 Q. Thank you. Now, I am moving to the
17 area of some planning principles and I will be going
18 through some interrogatories.

19 Would someone on the panel, would you
20 agree that higher electricity prices reduce the need
21 for load displacement NUG subsidies?

22 MR. SHALABY: A. They make the load
23 displacement projects more attractive to the proponent.

24 Q. Do you agree that the forecast power
25 surpluses reduce the need for such LD NUG subsidies?

1 A. They have had an impact on lowering
2 the avoided costs in the early 90s and late 90s.

3 Q. And, Mr. Shalaby, from a planning
4 point of view, if you are trying to achieve least cost
5 for your customers, why subsidize LD NUG during times
6 of power surpluses?

7 A. You will notice I am not accepting
8 your word subsidized.

9 Q. All right.

10 A. I think it is bringing the project
11 within total customer cost, or the project will become
12 a good deal for our customer comparable to supply
13 facilities or options from elsewhere.

14 Q. Yes. In fact, with respect to LD NUG
15 programs, they don't go through the total customer cost
16 test, do they? That's not the test that justifies
17 their cost effectiveness?

18 A. Something that is in the similar
19 principle is gone through.

20 Q. Now, if you turn to page 32 of the
21 exhibit, it's an interrogatory from Energy Probe, ID
22 No. 11.2.37.

23 THE REGISTRAR: .44.

24 ---EXHIBIT NO. 683.44: Interrogatory No. 11.2.37.

25 MR. MATTSON: Q. And the question was:

1 Is Hydro forecasting that there will
2 be any times in the future when Hydro
3 will be curtailing nuclear hydraulic
4 plants while thermal NUGs will be
5 delivering power?

6 You indicated in the answer:

7 Since most of the thermal NUGs are
8 contracted as base load generators with
9 little or no curtailment rights, it would
10 be expected that they would be delivering
11 power during off-peak weekday hours and
12 weekend hours when possible. Nuclear
13 curtailment is required to manage the
14 unutilized base load.

15 I believe is what UBG stands for.

16 MR. SNELSON: A. I believe Mr. Vyrostko
17 did testify on Panel 5 that some of the NUG contracts
18 have provisions for curtailment for a certain number of
19 hours, which allows us not to purchase that power
20 during periods of unutilized base load generation when
21 we have surplus nuclear and hydraulic.

22 Q. All right, Mr. Snelson. But would it
23 be fair to say that generally Hydro has considered NUGs
24 to be a base load option?

25 A. We did discuss that in Panel 5 and

1 most of the NUGs that we have under contract, and we
2 expect most cogeneration NUGs to be scheduled primarily
3 to meet the steam demand rather than to meet the
4 electricity demand.

5 When we come to major supply non-utility
6 generation we are working towards dispatchable
7 generation that would be available, either base load or
8 intermediate load or some combination, maybe even
9 peaking.

10 Q. All right. And, Mr. Snelson, the
11 contracting and pricing system for NUGs, existing NUGs,
12 the take-or-pay system, made Hydro effectively see NUGs
13 as having zero operating costs; correct?

14 A. The current system requires us to buy
15 the power when it's available at the price subject to
16 the terms of the contract and the contracts have
17 limited periods for us to turn that down.

18 Q. Mr. Snelson, the NUGs don't have zero
19 operating costs; do they?

20 A. That is correct.

21 Q. And you would agree that there will
22 be some economic penalties caused by Hydro's practices
23 resulting in plants being dispatched out of order in
24 terms of least fuel costs; correct?

25 A. As I have indicated, the cogeneration

1 plants are generally best dispatched to match the steam
2 demand and the current system allows that to happen.

3 Q. All right. If you turn to page 33 of
4 the exhibit, and this is an interrogatory from Energy
5 Probe, ID No. 11.2.35

6 THE REGISTRAR: .45.

7 ---EXHIBIT NO. 683.45: Interrogatory No. 11.2.35.

8 MR. MATTSON: Thank you.

9 Q. I am looking, Mr. Snelson, at the
10 UBG, in the response, the graph. Do you have that?

11 MR. SNELSON: A. Yes.

12 Q. And the interrogatory indicates that
13 Hydro is forecasting large amounts of unutilized base
14 load generation in the next five years; correct?

15 A. I see numbers ranging from 100
16 hours -- sorry, 200 hours to 1,800 hours.

17 Q. And would you agree, Mr. Snelson,
18 that the dollar value of losses due to running NUG
19 plants out of order, given the forecast, such a large
20 number of you UBG will be substantial?

21 A. That depends on the amount of energy
22 associated with it, and I see the amounts that are
23 there, and other opportunities to use that energy such
24 as to sell it over the interconnected systems.

25 Q. Can you estimate the losses?

1 A. No, not offhand.

2 Q. Now, if you would go to transcript
3 No. 149, page 26300. It's actually at the bottom of
4 page 26299, line 22, beginning, the question was:

5 "The first question that you spoke of
6 was revisiting an approach of
7 distributing generation in smaller
8 amounts without therefore requiring any
9 substantial additions to the bulk
10 transmission system. What did you find
11 when you looked at that set of
12 circumstances?"

13 And in the response, if you look at line
14 15:

15 "We find that we lose the benefits of
16 a high voltage transmission system and as
17 a consequence to this that we would need
18 more generation to maintain a comparable
19 level of reliability compared to the case
20 of centralized stations interconnected by
21 a strong transmission system."

22 My question is, in Hydro's mind what is
23 the reliability penalty of decentralization?

24 A. It's something that varies over time,
25 you can't put a number on it. But the principle is

1 that a lot of small generating systems in the growth of
2 interconnected power systems have been joined together
3 with transmission, and the reliability benefit is that
4 it allows a pooling of reserve generation amongst all
5 the systems that are connected together. And if the
6 transmission between each system and its neighbours is
7 not sufficient to enable surplus reserve in one area to
8 be used as reserve in another area, then the effect is
9 that each area has to go back to providing its own
10 generation reserves and in total more reserve will be
11 required.

12 Q. So the reliability penalty is a
13 function of a higher reserve margin?

14 A. I think that the higher reserve
15 margin is what you have to provide to maintain the same
16 level of reliability.

17 Q. All right. Mr. Snelson, in the
18 dispersed generation scenario can you estimate what the
19 line loss savings are? And if you can -- sorry.

20 MR. DALZIEL: A. I can't estimate or
21 quantify for you what the line losses would be. But in
22 general, in looking at this type of approach the line
23 losses were higher in the earlier period until you
24 reach that point in time where you have a more truly
25 distributed system and then the line losses do become

1 lower.

2 [3:28 p.m.]

3 Q. Mr. Dalziel, would you concede that
4 the line loss savings would be offsetting with the
5 reliability penalty for higher reserve margin?

6 A. I wouldn't be able to estimate that.

7 Q. In principle?

8 A. I don't know if they are on the same
9 scale, or not. What comes to mind is there are other
10 benefits as opposed to just the benefits of lower
11 reserve margins that would also be lost in this case.

12 Q. Such as?

13 A. Well, for example, the benefit of
14 being able to use generation in one part of the
15 province to supply load in a geographically different
16 part of the province perhaps due to generation problems
17 in other parts of the system, so that you can generate
18 economically electricity in one area and supply it to
19 another area of the province.

20 Q. Thank you. Now, I have a number of
21 questions arising out of Ontario Hydro's financial
22 position. If you turn to page 35 of the exhibit. And
23 this is Exhibit 11.2.41, and it is an excerpt of the
24 1988 Business Plan.

25 THE CHAIRMAN: 11.2.41.

1 REGISTRAR: .46.

2 ---EXHIBIT NO. 683.46: Interrogatory No. 11.2.41.

3 MR. MATTSON: Q. And, Dr. Long, I
4 believe these questions are directed to you. We see in
5 the graph...

6 I apologize, Mr. Chairman.

7 Before I take you to the graph, Dr. Long,
8 do you have transcript 149? Page 26386.

9 DR. LONG: A. 26386?

10 Q. Yes, at line 14. In direct you
11 indicated that:

12 "For each of the plans the borrowing
13 level for about the next 15 years is in
14 the range of \$2 to \$4 billion, and then
15 it moves up to around \$5 billion towards
16 the end of the period and this is due to
17 the funding requirements associated with
18 major supply."

19 Do you see that?

20 A. Yes, I have that.

21 Q. All right. Now, if you turn to page
22 35 of the exhibit.

23 A. Yes.

24 Q. Under figure 5.9, Borrowing.

25 A. Yes, I have that.

1 Q. You see that as recently as the 1988
2 Business Plan, which this is a graph from, Hydro's plan
3 for net borrowing indicated that in the current period,
4 1992 through 1994, net borrowing was forecast to be a
5 few hundred million dollars per year in 1988 dollars;
6 correct? Or '87 dollars.

7 A. Around which year, around 1992?

8 Q. 1992, '93, '94.

9 A. That's correct.

10 Q. And the most recent forecast, and we
11 have that at page 39 of the exhibit, titled Key
12 Results, Table 1.

13 A. That's correct.

14 Q. If you look down the column, under
15 net borrowing for 1992, the updated outlook is \$2.6
16 billion; correct?

17 A. That's correct.

18 Q. And would you agree, Dr. Long, that
19 Hydro's recent borrowing plans have been gross
20 underestimates relative to the current forecast for
21 near-term borrowing?

22 A. Well, a couple of observations I
23 would make. The net borrowings shown on page 35 are in
24 1987 dollars. The numbers shown on 39 are in escalated
25 dollars, 1992 dollars.

1 Q. Yes.

2 A. That is five years of escalation in
3 there.

4 Q. Yes.

5 A. If you took the numbers from page 35,
6 that would certainly increase them somewhat. But there
7 is no doubt that our expected borrowings in 1992 now
8 are higher than what they were back in 1987.

9 Q. All right. And, Dr. Long, again in
10 transcript 149, page 26384.

11 THE CHAIRMAN: I'm sorry, page 39, what
12 is the source of page 39?

13 MR. MATTSON: I'm sorry, Mr. Chairman.

14 THE CHAIRMAN: There is a date at the
15 bottom right-hand of the page that I can't read.

16 MR. MATTSON: 1992, May 25th.

17 THE CHAIRMAN: So that is current. And
18 what is the document it is taken from?

19 DR. LONG: That is taken from Hydro's
20 Update of the current OEB hearing.

21 THE CHAIRMAN: It is an OEB update, is
22 it?

23 DR. LONG: Yes.

24 THE CHAIRMAN: Is that what it is?

25 DR. LONG: Yes.

1 MR. MATTSON: Thank you, Dr. Long.

2 MR. B. CAMPBELL: We don't discriminate
3 on updates.

4 THE CHAIRMAN: And that was the figure
5 you were looking at that you said was the net
6 borrowing? That is the figure we are trying to assess?

7 MR. MATTSON: Yes, Mr. Chairman, net
8 borrowing under 1992, \$2.6 billion.

9 THE CHAIRMAN: Yes. Are you suggesting
10 that that is inconsistent with evidence he has given up
11 to now?

12 MR. MATTSON: No, Mr. Chairman. Just
13 very much larger than the forecast that we had earlier
14 in the evidence from the '88 Business Plan.

15 THE CHAIRMAN: Well, I thought the
16 forecast that you took him to in the transcript was for
17 some period of time later; is that not right?

18 DR. LONG: It was for, I guess, the full
19 period of our current projection. But Mr. Mattson
20 hasn't asked me any questions on that yet.

21 MR. MATTSON: That's correct.

22 THE CHAIRMAN: But what is the 2.6 being
23 compared with in this question is what I am trying to
24 get at.

25 DR. LONG: On page 35 of Exhibit 711 is

1 the excerpt from the 1988 Business Plan. And it is the
2 figure on the graph labelled figure 5.9.

3 THE CHAIRMAN: Oh, I see. That is the
4 net borrowing figure; is that right?

5 DR. LONG: I believe. That is what I was
6 referring my answer to.

7 MR. MATTSON: That is correct, Dr. Long.
8 Thank you.

9 THE CHAIRMAN: Okay.

10 MR. MATTSON: Q. And, Dr. Long, then, if
11 you would turn to page 26386 again.

12 DR. LONG: A. Yes.

13 Q. In the earlier reference I made in
14 the transcript.

15 A. Yes.

16 Q. And I read between lines 14 and 18.
17 What security do we have in the correctness of that
18 statement in light of the updated plan?

19 A. What security do we have?

20 Q. In the correctness.

21 MR. B. CAMPBELL: Well, just a minute,
22 Mr. Chairman. As I read the excerpt from the
23 transcript, again we are not even comparing the same
24 number. The transcript refers to total borrowings, not
25 net borrowings, which is a substantially different

1 number for reasons that I won't go into.

2 MR. MATTSON: That's correct, Mr.
3 Chairman. And all I am asking for, in light of the --
4 which I put to you the overestimate in the earlier
5 comparison what --

6 MR. B. CAMPBELL: But, Mr. Chairman, the
7 overestimate, the comparison that has been done is with
8 respect to net borrowings, not total borrowings.

9 MR. MATTSON: I understand.

10 MR. B. CAMPBELL: It is a substantially
11 different matter.

12 THE CHAIRMAN: Well, total borrowings in
13 1989 were projected at what? It is hard to read this
14 graph. Somewhere around 2-1/2 billion, would that be
15 right?

16 MR. MATTSON: 200 million?

17 THE CHAIRMAN: No, no. Total borrowing.

18 MR. MATTSON: Oh, sorry.

19 DR. LONG: Gross borrowings was about 2.5
20 billion as per page 35 of Exhibit 711.

21 THE CHAIRMAN: And what is the total on
22 page 39?

23 DR. LONG: There is no 1989 figure there.

24 THE CHAIRMAN: I'm sorry, I misunderstood
25 you. We are looking at page 35; right?

1 DR. LONG: That is correct.

2 THE CHAIRMAN: And that is a prediction
3 made, then, for borrowing a number of years going out
4 to, it looks like 1997. It is hard for me to read.
5 What does it say for the total borrowings for 1992?

6 DR. LONG: Somewhere between \$2 and
7 \$2-1/2 billion, again expressed in 1987 dollars.

8 THE CHAIRMAN: Right. And what is the
9 corresponding figure on page 39, if there is one?

10 DR. LONG: It would be the 4.8 billion
11 shown under updated outlook for 1992.

12 THE CHAIRMAN: All right. Okay.

13 MR. MATTSON: Thank you.

14 Q. And again, Dr. Long, there has been
15 nearly a doubling in that estimate; correct?

16 THE CHAIRMAN: Well, you haven't taken
17 into account the escalation of the dollars.

18 DR. LONG: That is one factor. And
19 another factor, and I don't have the details at my
20 fingertips, is, if you go back to page 35, the
21 refinancing portion is something that varies quite a
22 bit because part of that is not mandatory refinancing.
23 Some of it is taking opportunities to refinance to save
24 costs. And that can vary from year to year.

25 MR. MATTSON: Q. And, Dr. Long, total

1 borrowings are above where they used to be, what we saw
2 established on page 35; correct? What you forecast in
3 1988.

4 DR. LONG: A. When you say total
5 borrowings, gross borrowings now? Total borrowings?
6 Okay.

7 Q. Yes.

8 A. Using the term total borrowing, then,
9 yes.

10 Q. And, Dr. Long, what impact, if any,
11 would that have on your evidence at lines 14 to 18 of
12 transcript that I referred you to at page 26386?

13 A. What I said in my direct testimony,
14 that transcript references our current long-term
15 outlook, and that outlook still stands. I have also
16 said in my testimony that long-term financial
17 projections are subject to uncertainty.

18 Q. And that uncertainty is demonstrated
19 in the earlier example of your total borrowings and
20 your net borrowings that we referred you to.

21 A. Circumstances change, plans change,
22 economic outlook changes. There are a whole manner of
23 things that can contribute to a change in borrowing.

24 Q. Thank you. And if you turn to page
25 26384 of your evidence.

1 A. I have that.

2 THE CHAIRMAN: I'm sorry, what is the
3 number again?

4 MR. MATTSON: 26384, just one page prior.

5 THE CHAIRMAN: Thank you.

6 MR. MATTSON: Q. And I am looking at
7 line 16.

8 "The long-term rate outlook that I
9 have currently shown you, being
10 consistent with the Update, is
11 significantly higher than that that was
12 projected at the time of the original
13 Demand/Supply Plan.

14 Is that correct?

15 DR. LONG: A. That is what I said.

16 Q. Now, my question is whether
17 consistently higher is an adequate description?
18 Wouldn't in the opposite direction be more appropriate?
19 In other words, if we look at page 44 of the exhibit.

20 A. I have that.

21 Q. And at page 43 is the cover for that.
22 It is an Ontario Energy Board interrogatory.

23 A. Yes.

24 Q. From the Board itself. And your
25 answer is a graph which shows real electricity price.

1 Do you see that, Dr. Long?

2 A. Yes.

3 Q. And do you see the 1989 plan?

4 A. That is the 1989 Business Plan, yes.

5 Q. Yes. And that is consistent with the
6 original Demand/Supply Plan?

7 A. I'm not sure that it was perfectly
8 consistent, but pretty consistent, yes.

9 Q. All right.

10 A. It was prepared a little after the
11 completion of the Demand/Supply Plan.

12 Q. And you would agree that in that plan
13 your prices are dropping consistently, correct, to the
14 year 1999?

15 A. The general trend is downwards, yes.

16 [3:43 p.m.]

17 Q. If you look at 1993 rate proposal--

18 A. Yes.

19 Q. --the trend is now upwards?

20 A. Yes. Significantly higher, as I said
21 in my evidence.

22 Q. Consistently. And would you say
23 significantly higher as well?

24 A. I said significantly higher.

25 THE CHAIRMAN: He said significantly, he

1 didn't say consistently.

2 MR. MATTSON: Sorry.

3 Q. Now, Dr. Long, if you turn another
4 page forward in your transcript evidence to page 26385.
5 Do you have that?

6 DR. LONG: A. Yes, I have that.

7 Q. At the bottom of the page, and your
8 answer in chief:

9 "As I said, the effect of these
10 factors is largely independent of Hydro's
11 longer term plans to balance supply and
12 demand, meaning that this outlook for
13 higher prices would be an underlying
14 feature of any alternative for dealing
15 with future supply and demand."

16 A. I see that.

17 Q. Has Ontario Hydro considered any
18 options for reducing rates apart from actions such as
19 borrowing to meet operating costs?

20 A. That wouldn't provide a solution
21 to -- that certainly would not provide lower rates
22 except in the very short-term.

23 Q. All right. Are you looking at any
24 concrete or demonstrably beneficial measures that you
25 might be able to take in the long-term?

1 A. I think the control of costs and the
2 control of rates and balancing rates with financial
3 soundness is something that the Corporation and the
4 board of directors is constantly concerned with.

5 Q. Would you agree, Dr. Long, that - I am
6 not sure if you are familiar with this - but would you
7 agree that the contracts between Nordic Power and the
8 Windsor Utility that we have heard about would have
9 provided cheaper power to Windsor than Hydro can
10 provide?

11 A. Could you actually repeat the
12 question.

13 Q. Yes. The proposed contract between
14 Nordic Power and the City of Windsor Utility
15 Commission, that this would have provided cheaper power
16 to Windsor than Hydro can provide the City of Windsor?

17 A. I am not sufficiently familiar with
18 it to be able to confirm or deny that.

19 Q. Mr. Snelson?

20 THE CHAIRMAN: It's bit off-track from
21 the financial considerations that we have been
22 discussing for the last 10 minutes. Perhaps we should
23 again take the break and you can think about that
24 question.

25 MR. MATTSON: Thank you, Mr. Chairman.

1 THE REGISTRAR: Please come to order.

2 This hearing will recess for 15 minutes.

3 ---Recess at 3:45 p.m.

4 ---On resuming at 4:03 p.m.

5 THE REGISTRAR: Please come to order.

6 This hearing is again in session. Please be seated.

7 THE CHAIRMAN: Mr. Mattson?

8 MR. MATTSON: Thank you, Mr. Chairman.

9 Q. I will just finish off this point. I
10 was looking, Dr. Long, or asking you about concrete
11 ways or measures that we could take to reduce rates or
12 reduce the borrowing requirements, and I put to you the
13 City of Windsor and Nordic Power deal, and I wondered
14 if that could be a possible alternative to be used by
15 Ontario Hydro to reduce rate impacts to customers even
16 if those customers are buying power from someone other
17 than Ontario Hydro?

18 DR. LONG: A. I think the answer I gave
19 just before the break still stands. I really don't
20 know enough about it to be able to comment.

21 Q. Mr. Snelson?

22 MR. SNELSON: A. Yes?

23 Q. Can you answer that?

24 A. I can't answer specifically about the
25 rate impacts. I believe that I did indicate that

1 Ontario Hydro was reconsidering its policy with respect
2 to the municipal utilities' right of first refusal for
3 non-utility generation in its service territory, and
4 that Windsor was the example which triggered this
5 decision to reconsider that policy.

6 Q. All right.

7 THE CHAIRMAN: The present policy being
8 that you don't let them do it; is that right?

9 MR. SNELSON: The policy that was
10 discussed on Panel 5 by Mr. Vyrosto was that we do
11 allow municipal utilities to have the right of first
12 refusal for non-utility generation in their own service
13 territory.

14 The situation with Windsor was that I
15 believe it's two large non-utility generators that were
16 negotiating for the sale of power to Ontario Hydro,
17 that Windsor decided to take up those offers, and this
18 would have been a very large part of the load for the
19 Windsor area, and there was concern as to the sharing
20 of risks and benefits between the customers of the
21 Windsor utility and the customers of the other
22 municipal utilities province-wide.

23 THE CHAIRMAN: I see.

24 MR. MATTSON: Q. Mr. Snelson, is it fair
25 to say that the offer to the City of Windsor was at

1 rates below Ontario Hydro's rates; correct?

2 MR. SNELSON: A. I don't know that for
3 sure.

4 Q. Are you aware if rates in Windsor
5 would have gone down if the deal had gone through?

6 A. No, I am not.

7 Q. If you could turn to page 47 of the
8 Exhibit, it's an interrogatory from Energy Probe, No.
9 11.2.39.

10 THE REGISTRAR: That is .47.

11 ---EXHIBIT NO. 683.47: Interrogatory No. 11.2.39.

12 MR. MATTSON: Q. Just briefly, the
13 question was:

14 Could Hydro remain solvent without the
15 debt guarantee if customers gain the
16 right to purchase power from producers of
17 their choice?

18 And the answer was:

19 Hydro has not studied the scenario in
20 question, and is therefore not in a
21 position to respond.

22 Would that still be the case Mr. Snelson,
23 or Dr. Long?

24 DR. LONG: A. I think that's something
25 that I should answer. And yes, that's still the case,

1 we have not studied that.

2 MR. MATTSON: Thank you.

3 Now, Mr. Chairman, because of the
4 elimination of a number of our questions we finished
5 our cross-examination. I had given some other counsel
6 for other intervenors indication that we would be the
7 full day. And I apologize for any inconvenience this
8 causes you by finishing so early, and I hope that that
9 doesn't inconvenience them.

10 THE CHAIRMAN: Anyone who finishes their
11 cross-examination earlier than they thought is not
12 going to get very much criticism from this source.
13 [Laughter]

14 Thank you very much, Mr. Mattson.

15 MR. MATTSON: Thank you.

16 MS. SPOEL: Mr. Chairman, I think I am
17 supposed to be next but I am not quite ready, given
18 that I had been told I wouldn't have to cross-examine
19 until tomorrow. The photocopier hasn't been working
20 all day and we have had various technical problems, so
21 if I could start first thing in the morning I would
22 appreciate that.

23 THE CHAIRMAN: That will be fine. We
24 will adjourn then until tomorrow morning at ten
25 o'clock.

1 THE REGISTRAR: Please come to order.

2 This hearing will adjourn until ten o'clock tomorrow
3 morning.

4 ---Whereupon the hearing was adjourned at 4:10 p.m., to
5 be reconvened on Thursday, June 11, 1992, at
6 10:00 a.m.

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